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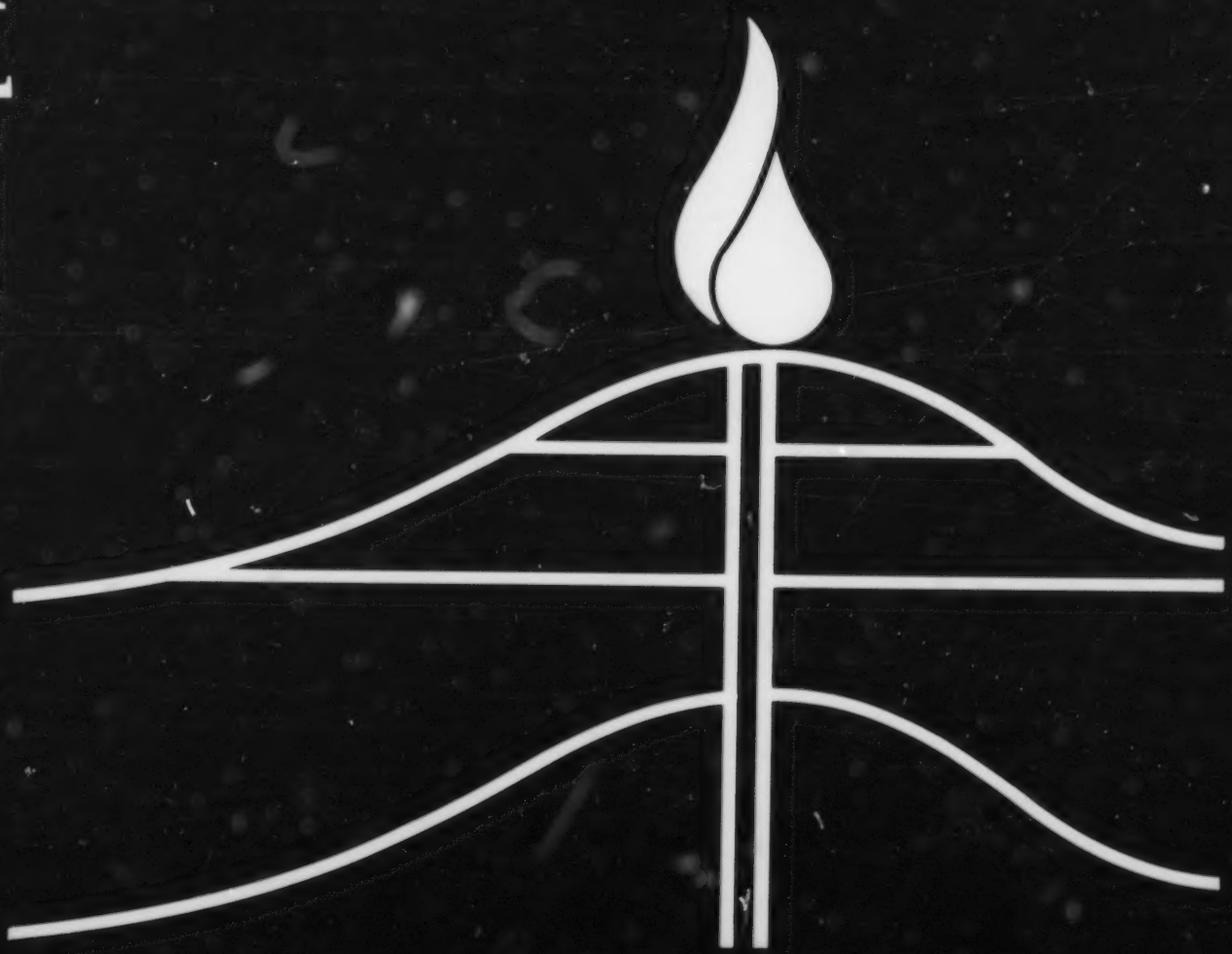
Reservoir Annual 1988

Saskatchewan



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PREFACE

The 1988 Reservoir Annual has been compiled to consolidate pertinent information on all oil and gas reservoirs in Saskatchewan into a convenient reference manual. The main sections of the report contain oil and gas reserves data, development and producing data and information concerning enhanced recovery projects. The remaining sections present related reservoir information.

Publication of the Reservoir Annual commenced in 1963 and has since undergone a number of changes to improve the presentation and to increase the amount of information that is useful to both industry and government.

I would like to acknowledge the assistance of the oil and gas companies operating in Saskatchewan for submitting to the department much of the material that has been used in the preparation of this report.

Rick Swenson
Minister of Energy and Mines

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INTRODUCTION

INTRODUCTION

The 1988 Reservoir Annual is published by Saskatchewan Energy and Mines to provide current statistical information with regard to performance and reservoir parameters of Saskatchewan oil and gas pools. The 1988 edition is subdivided into ten sections, each dealing with a specific type of reservoir data. Section B presents maps showing oil and gas pools, production and disposition areas, well spacing areas and other related information. Of considerable importance are sections C and D, which provide reservoir data and reserves for all provincial oil and gas pools broken down by unit and non-unit areas. Section E contains a listing of oil and gas units and provides such information as operator, producing zone, number of active wells and project data such as pattern type, commencement date and injection rates. The section titled "Development Data" presents information on natural depletion mechanism, enhanced recovery projects, well spacing and target areas for all Saskatchewan oil and gas pools. The remaining four sections include illustrations of typical producing well logs, pool pressure data, Maximum Permissive Rate factors and gas plant performance plots. All reserve, production, pool boundary and well spacing information contained in this publication is as of December 31, 1988, unless otherwise noted.

The reserve values contained in the Reservoir Annual are "established reserves" as adopted from the recommendations of The Joint Industry/Government Task Force on Uniform Reserves Terminology. Established reserves are defined as those reserves recoverable under current technology and present and anticipated economic conditions, specifically proved by drilling, testing or production, plus that judgement portion of contiguous recoverable reserves that are interpreted to exist from geological, geophysical or similar information, with reasonable certainty.

Provincial oil production in 1988 again exceeded 12 million cubic metres, reflecting a continuation of good oil market conditions, and a reasonable level of exploration and development activity. Initial established oil reserves increased by over 25.7 million cubic metres due to the addition of 1 084 new producing oil wells, 40 new or expanded waterflood projects, and 3 new or expanded EOR (enhanced oil recovery) projects. This was reduced to about 19.4 million cubic metres because of better definition of existing reserves. The most significant increase in reserves due to drilling was again in Area IV (Weyburn-Estevan), while most of the increase due to waterflood and EOR activity was in Areas II and III (Kindersley and Swift Current). Provincial reserve increases exceeded production for the year by almost 7.2 million cubic metres, resulting in a remaining established reserve figure of 120.7 million cubic metres at year end, the highest since 1973. Table 1 provides a more detailed look at the changes in oil reserves.

Natural gas production in 1988 was 4.09 billion cubic metres, exceeding the 1987 production by 59%. Initial reserves of gas were increased by 9.21 billion cubic metres in 1988, resulting in a net increase of 5.09 billion cubic metres and a remaining established reserves year-end value of 74.37 billion cubic metres. These reserve increases were largely due to the continued high rate of gas well drilling, which resulted in 742 completions in 1988.

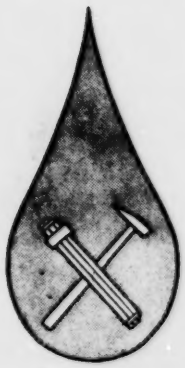
The objective of this publication is to provide subscribers in the oil and gas industry with reliable and pertinent information on provincial oil and gas resources and any suggestions or comments on improvements in this regard would be welcomed by Saskatchewan Energy and Mines.

TABLE 1
REMAINING OIL RESERVES IN SASKATCHEWAN
(Million Cubic Metres)

Area	Remaining Established Reserves (Dec. 31/87)	1988 Additions to Reserves			1988 Production	Net Change in Reserves During 1988	Remaining Established Reserves (Dec. 31/88)
		Revisions	Drilling	Total			
Area I – Heavy	23.091	+0.834	+1.663	+2.497	2.826	−0.329	22.762
Area II – Heavy	8.434	+4.947	+0.205	+5.152	0.855	+4.297	12.731
Area II – Light	10.063	−1.088	+1.745	+0.657	1.060	−0.403	9.660
Area III – Medium	16.797	+5.933	+1.635	+7.568	1.978	+5.590	22.387
Area IV – Medium	27.061	−1.050	+1.476	+0.426	2.454	−2.028	25.033
Area IV – Light	28.086	−1.867	+4.977	+3.110	3.069	+0.041	28.127
PROVINCIAL TOTAL	113.532	+7.709	+11.701	+19.410	12.242	+7.168	120.700

POOL AND AREA

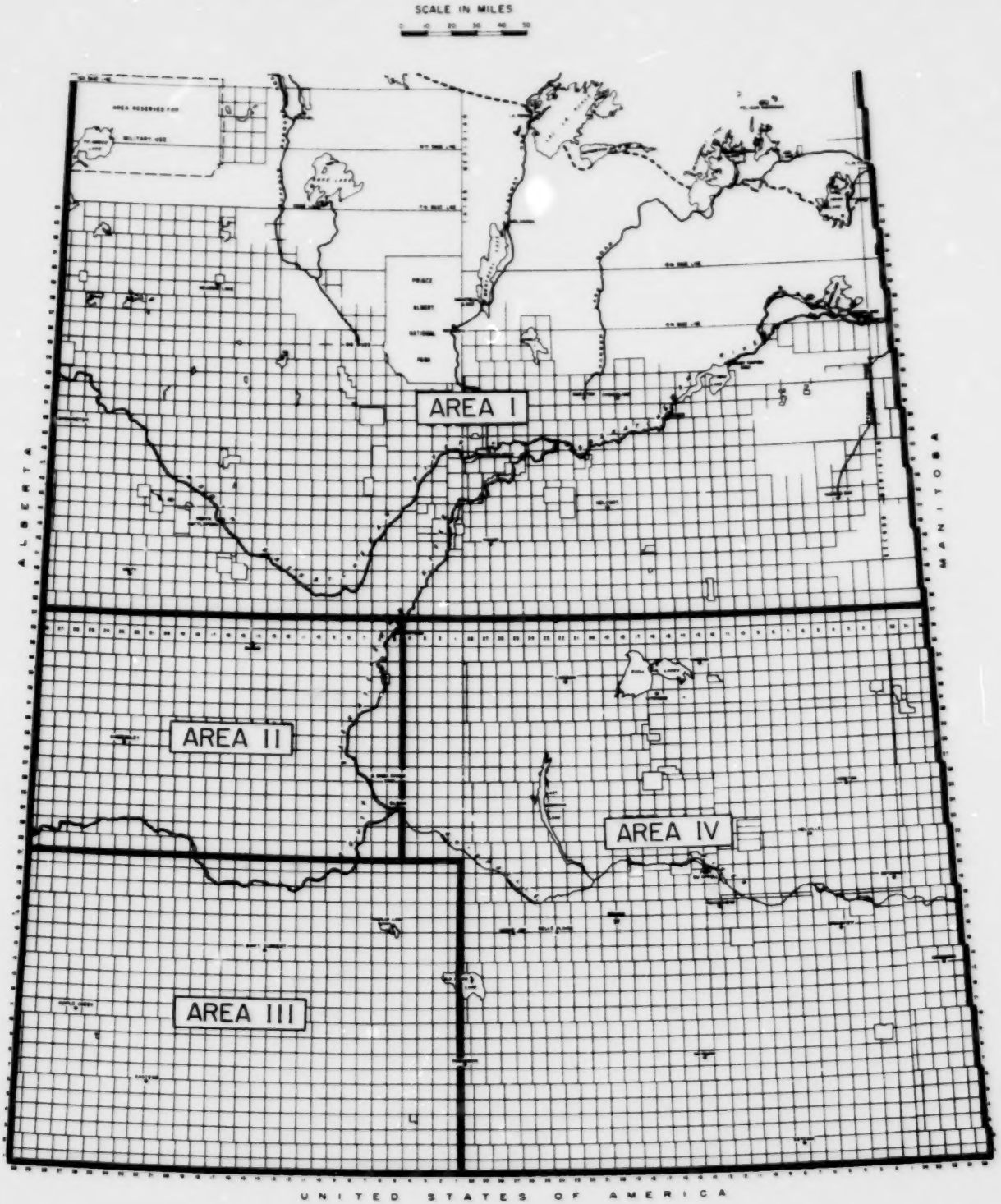
MAPS

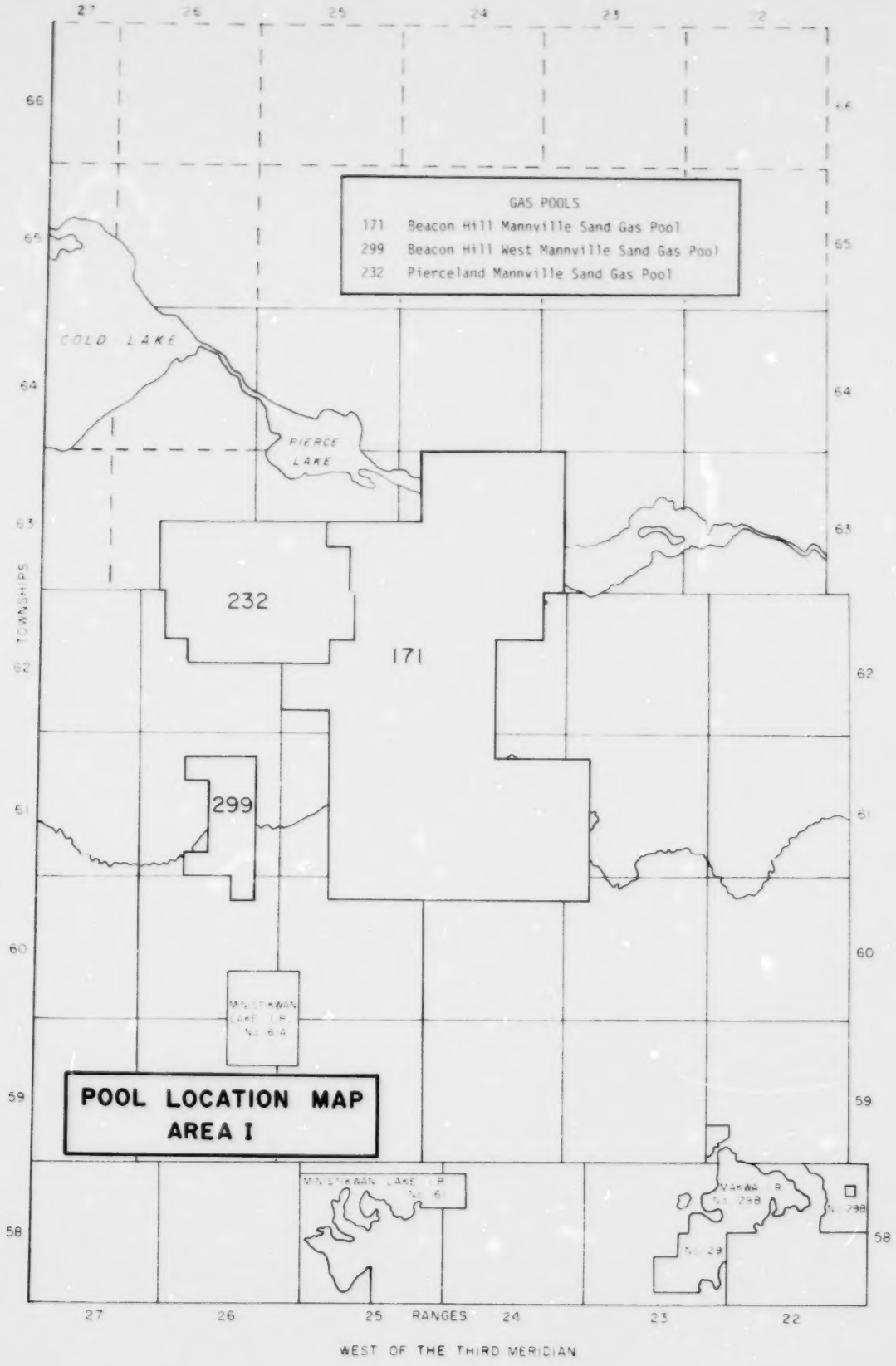


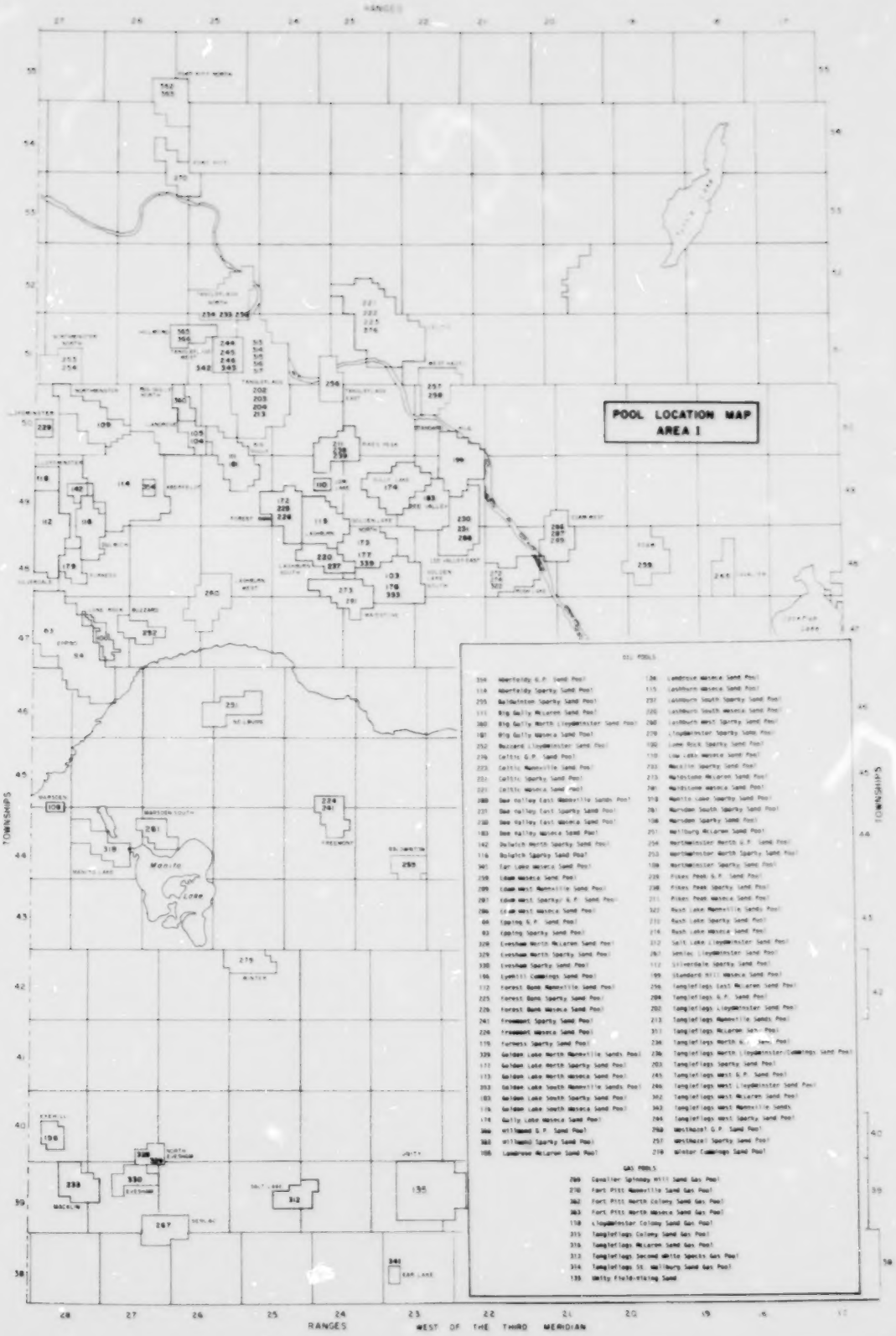
SASKATCHEWAN

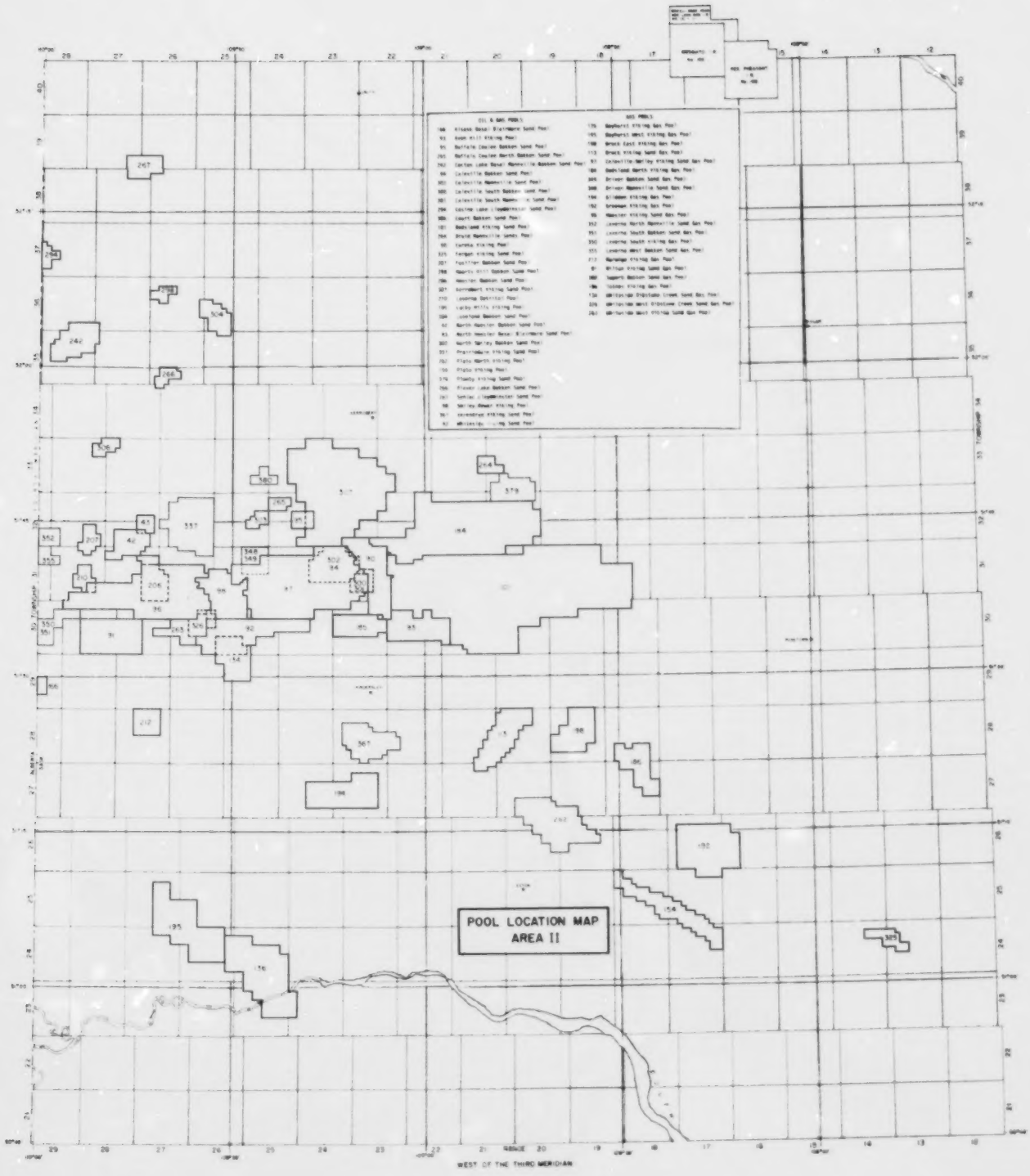
PETROLEUM AND NATURAL GAS

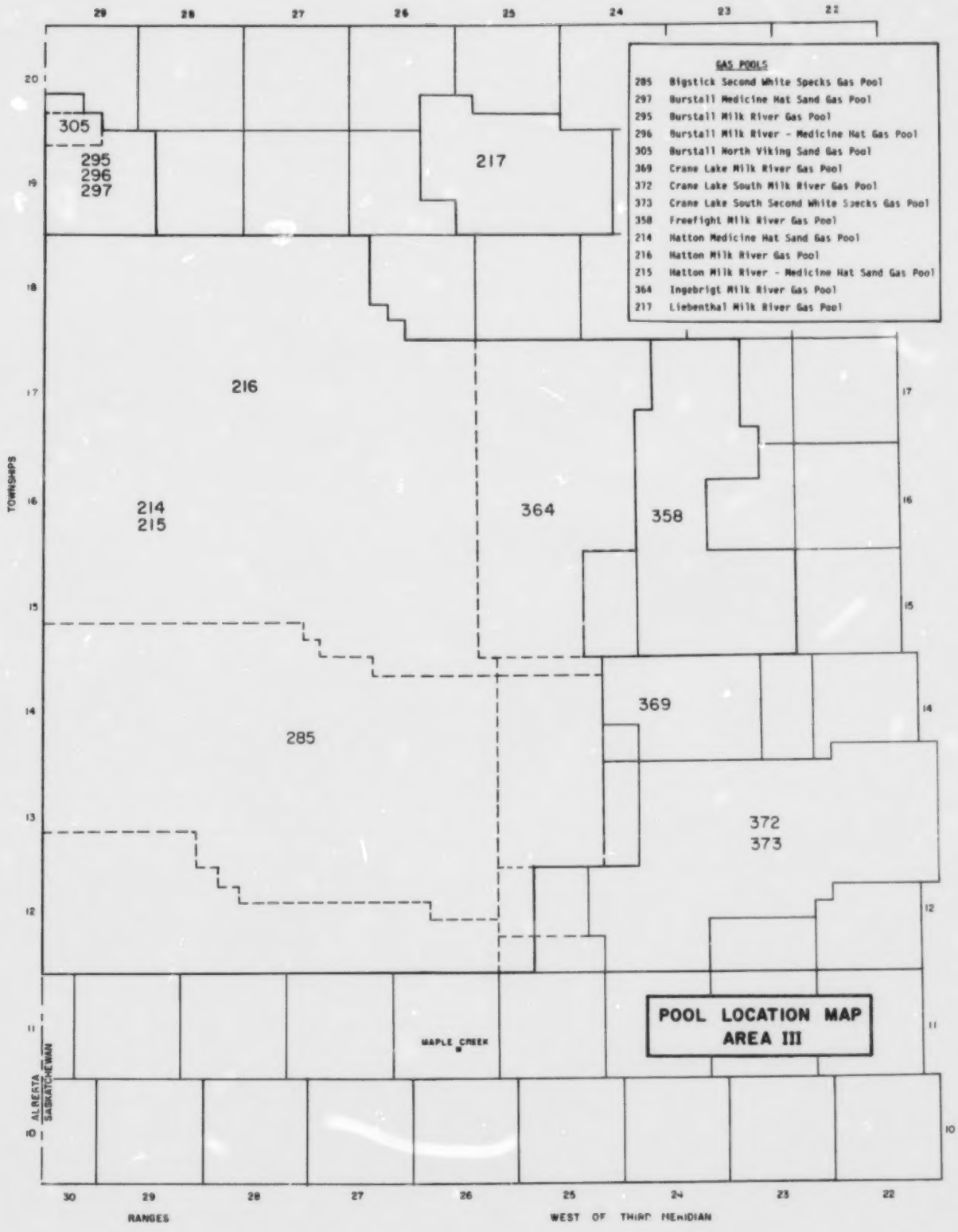
PRODUCTION AND DISPOSITION AREAS




GAS POOLS
171 Beacon Hill Mannville Sand Gas Pool
299 Beacon Hill West Mannville Sand Gas Pool
232 Pierceland Mannville Sand Gas Pool
COLD LAKE
PIERCE LAKE
232
171
299
POOL LOCATION MAP
AREA I
TOWNSHIPS
RANGES
WEST OF THE THIRD MERIDIAN


POOL LOCATION MAP
AREA 1
RANGES
TOWNSHIPS
RANGES WEST OF THE THIRD MERIDIAN
OIL POOLS
GAS POOLS


POOL LOCATION MAP
AREA II


GAS POOLS
285 Bigstick Second White Specks Gas Pool
297 Burstall Medicine Hat Sand Gas Pool
295 Burstall Milk River Gas Pool
296 Burstall Milk River - Medicine Hat Gas Pool
305 Burstall North Viking Sand Gas Pool
369 Crane Lake Milk River Gas Pool
372 Crane Lake South Milk River Gas Pool
373 Crane Lake South Second White Specks Gas Pool
358 Freefight Milk River Gas Pool
214 Hatton Medicine Hat Sand Gas Pool
216 Hatton Milk River Gas Pool
215 Hatton Milk River - Medicine Hat Sand Gas Pool
364 Ingebrigt Milk River Gas Pool
217 Liebenthal Milk River Gas Pool
305
295
296
297
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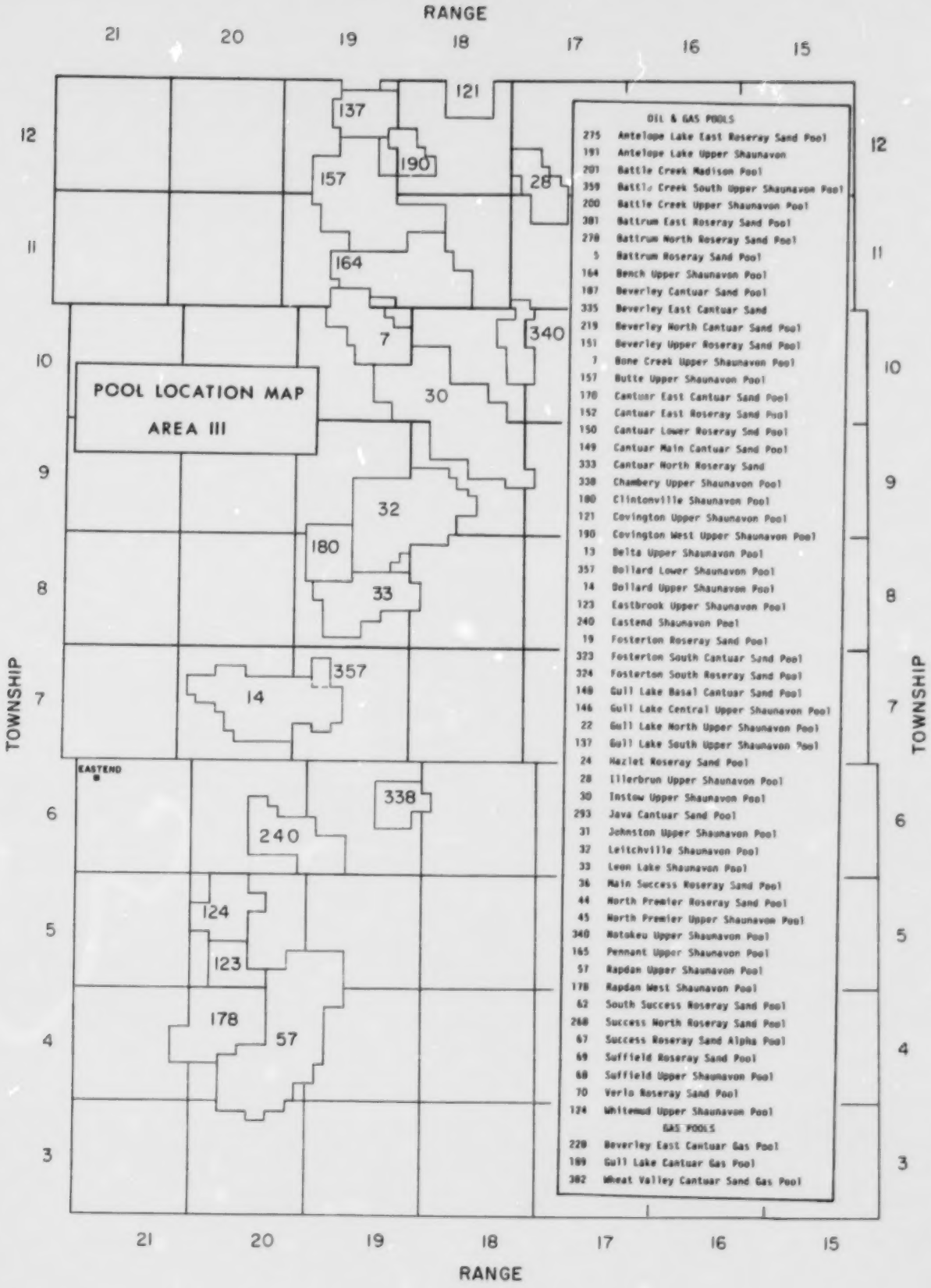
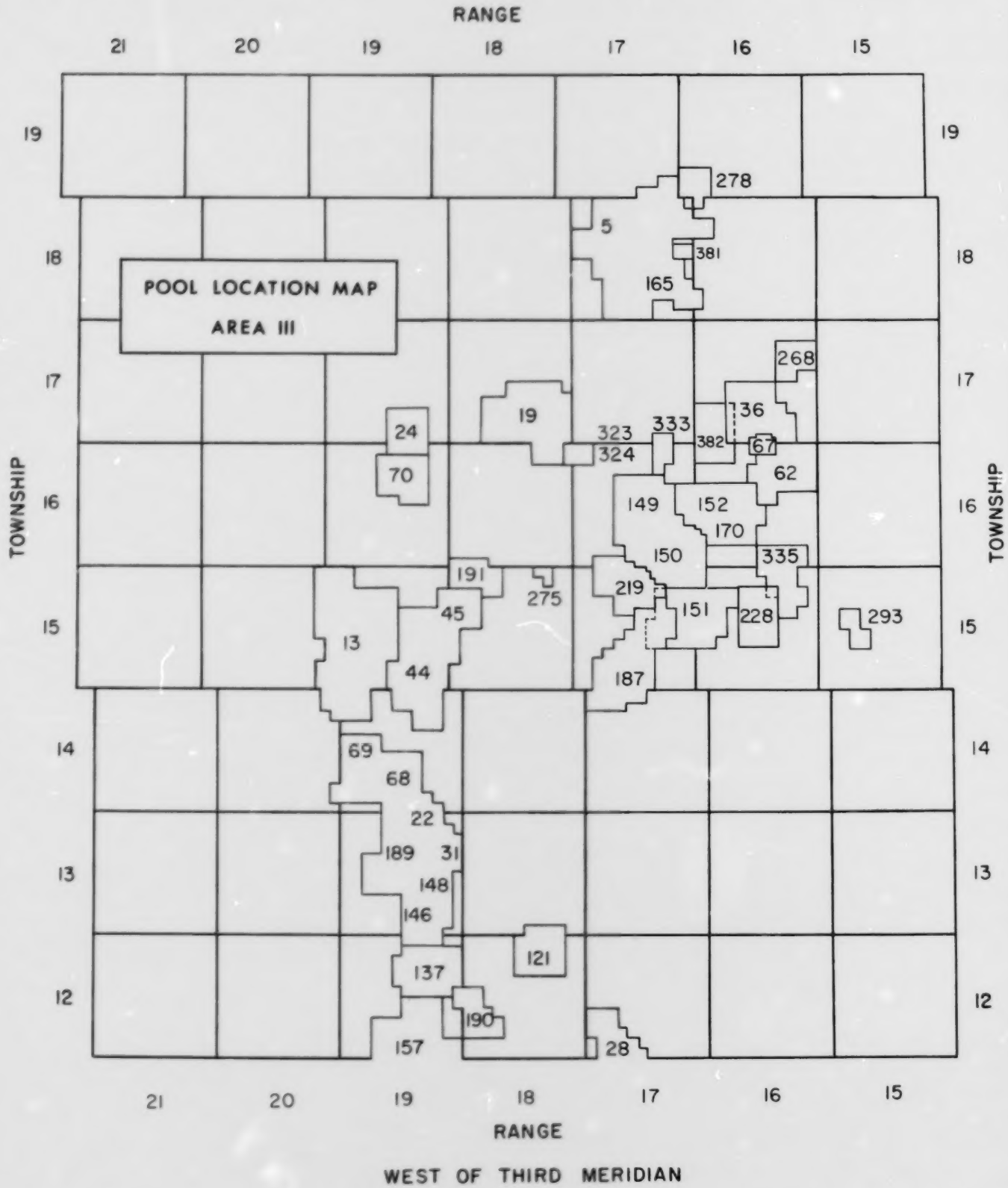
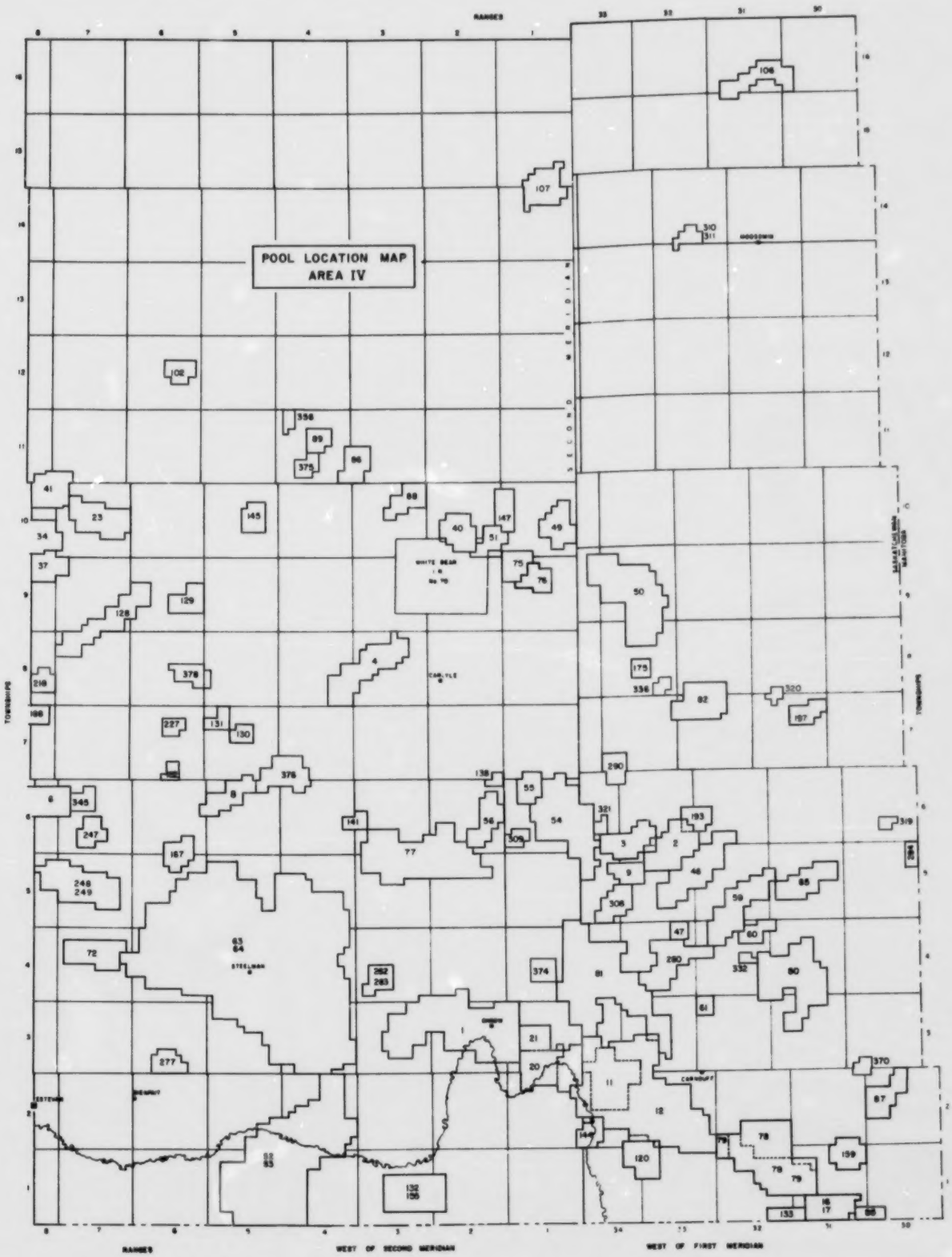
373
POOL LOCATION MAP
AREA III
MAPLE CREEK
ALBERTA
SASKATCHEWAN
TOWNSHIPS
RANGES
WEST OF THIRD MERIDIAN



WEST OF THIRD MERIDIAN


RANGE
21
20
19
18
17
16
15
TOWNSHIP
19
18
17
16
15
14
13
12
POOL LOCATION MAP
AREA III
278
5
381
165
268
19
36
24
323
333
382
67
324
70
62
149
152
170
150
335
191
275
219
151
228
293
45
13
44
187
69
68
22
189
31
148
146
121
137
190
157
28
RANGE
WEST OF THIRD MERIDIAN

OIL & GAS POOLS
AREA IV
1 Alameda Middle Beds Pool
283 Alameda West Frobisher Beds Pool
282 Alameda West Middle Beds Pool
2 Alida East Frobisher - Alida Beds Pool
321 Alida North Alida Beds Pool
3 Alida West Alida Beds Pool
4 Arcola Frobisher Alida Beds Pool
309 Auburnton Frobisher - Alida Beds Pool
345 Benson East Middle Beds Pool
377 Benson Frobisher Beds Pool
6 Benson Middle Beds Pool
277 Bienfait Middle Beds Pool
153 Bromhead Middle Beds Pool
8 Browning Frobisher Alida Beds Pool
249 Bryant Frobisher Beds Pool
248 Bryant Middle Beds Pool
9 Cantal Frobisher Alida Beds Pool
309 Cantal South Frobisher - Alida Beds Pool
11 Carnduff Frobisher Beds Pool
12 Carnduff Middle Beds Pool
130 Clarillon Frobisher Alida Beds Pool
131 Clarillon West Frobisher - Alida Beds Pool
360 Colgate Middle Beds Pool
142 Crystal Hill Souris Valley Beds Pool
141 Dalesboro Frobisher Alida Beds Pool
193 Edenvale Tilston Beds Pool
16 Elmore Frobisher Beds Pool
17 Elmore Middle Beds Pool
334 Elswick Middle Beds Pool
284 Fertile Tilston Beds Pool
319 Fertile Tilston Souris Valley Beds Pool
18 Flat Lake Ratcliffe Beds Pool
144 Florence Frobisher Beds Pool
158 Freda Lake Ratcliffe Beds Pool
178 Freestone Frobisher Alida Beds Pool
320 Frys East Tilston Souris Valley Beds Pool
197 Frys Tilston Souris Valley Beds Pool
87 Gainsborough Frobisher Alida Beds Pool
310 Gainsborough North Frobisher Alida Beds Pool
20 Glen Ewen Frobisher Beds Pool
21 Glen Ewen Middle Beds Pool
160 Griffin Frobisher Beds Pool
23 Handsworth Alida Beds Pool
119 Hartaven Frobisher Alida Beds Pool
280 Hastings East Frobisher Beds Pool
81 Hastings Frobisher Beds Pool
374 Hastings West Frobisher Beds Pool
375 Hazelwood South Tilston Beds Pool
89 Hazelwood Tilston Beds Pool
356 Hazelwood West Tilston Beds Pool
337 Hoffer Ratcliffe Beds Pool
143 Hume Frobisher Beds Pool
156 Hume Middle Beds Pool
361 Hummingbird Bakken Sand Pool
139 Hummingbird Birdbear Pool
140 Hummingbird Ratcliffe Beds Pool
27 Huntoon Frobisher Beds Pool
26 Huntoon Middle Beds Pool
80 Ingoldsby Frobisher-Alida Beds Pool
332 Ingoldsby West Frobisher Alida Beds Pool
29 Innes Frobisher Beds Pool
88 Kenesee Tilston Beds Pool
227 Kisbey Birdbear Pool
378 Kisbey Frobisher Alida Beds Pool
127 Lake Alma Ratcliffe Beds Pool
87 Lightning Tilston Beds Pool
34 Lost Horse Hill Frobisher Alida Beds Pool
35 Lougheed Middle Beds Pool
188 Macoun Middle Beds Pool
250 Macoun West Middle Beds Pool
37 Melrose Frobisher Alida Beds Pool
38 Middle Central Frobisher Beds Pool
39 Middle Central Middle Beds Pool
247 Minard Middle Beds Pool
40 Moose Mountain Tilston Beds Pool
102 Moose Valley Tilston Beds Pool
182 Morrisview Frobisher Alida Beds Pool
161 Neptune Ratcliffe Beds Pool
85 North Antler Middle Beds Pool
41 North Handsworth Alida Beds Pool
132 Northgate Frobisher Beds Pool
155 Northgate Middle Beds Pool
46 Nottingham Alida Beds Pool
47 Oakley Frobisher Beds Pool
48 Oungre Ratcliffe Beds Pool
49 Parkman Souris Valley Beds Pool
175 Parkman South Tilston Souris Valley Beds Pool
51 Parkman Tilston Beds Pool
50 Parkman Tilston Souris Valley Beds Pool
52 Pinto Frobisher Beds Pool
53 Pinto Middle Beds Pool
54 Queensdale East Frobisher Alida Beds Pool
55 Queensdale North Alida Beds Pool
56 Queensdale West Alida Beds Pool
205 Ralph Middle Beds Pool
311 Red Jacket Gravelbourg Pool
310 Red Jacket Shaunavon - Gravelbourg Pool
186 Rocanville Bakken Sand Pool
58 Roncott Bakken Sand Pool
59 Rosebank Alida Beds Pool
60 Rosebank South Alida Beds Pool
133 Sherwood Frobisher Beds Pool
61 Silverton Frobisher Beds Pool
140 Skinner Lake Ratcliffe Beds Pool
120 Souris Flat Frobisher Beds Pool
86 South Flotunde Tilston Beds Pool
129 Star Valley Frobisher Alida Beds Pool
63 Steelman Frobisher Beds Pool
64 Steelman Middle Beds Pool
65 Storthoaks Alida-Tilston Beds Pool
66 Stoughton Frobisher Alida Beds Pool
218 Stoughton South Frobisher Beds Pool
371 Tableland Winnipegosis Pool
243 Tatagwa Middle Beds Pool
344 Tatagwa North Middle Beds Pool
71 View Hill Middle Beds Pool
188 Viewfield Frobisher Beds Pool
187 Wapella Sand Pool
145 Wormley Alida Beds Pool
240 Wauchope Alida Tilston Beds Pool
336 Wauchope North Tilston Beds Pool
167 Weir Hill Frobisher Beds Pool
117 West Innes Frobisher Beds Pool
72 West Kingsford Middle Beds Pool
73 Weyburn Frobisher Beds Pool
74 Weyburn Middle Beds Pool
75 White Bear Tilston Beds Pool
76 White Bear Tilston Souris Valley Beds Pool
138 Wildwood Alida Beds Pool
77 Willmar Frobisher Alida Beds Pool
199 Winmore Frobisher Beds Pool
376 Wordsworth Frobisher Alida Beds Pool
78 Workman Frobisher Beds Pool
79 Workman Middle Beds Pool
RANGES
TOWNSHIPS
WEST OF SECOND MERIDIAN
POOL LOCATION MAP
AREA IV


POOL LOCATION MAP
AREA IV
RANGES
WEST OF SECOND MERIDIAN
WEST OF FIRST MERIDIAN
TOWNSHIPS
WHITE BEAR
CARLYLE
STEELMAN
CORNDUFF

RESERVOIR DATA

RESERVES AND

PRODUCTION — OIL

FIVE YEAR OIL SUMMARY

	1984	1985	1986	1987	1988
INITIAL ESTABLISHED RESERVES (Million Cubic Metres)					
Area I - Heavy	61.198	65.070	64.449	65.926	68.419
Area II - Heavy	18.740	19.077	19.334	20.930	26.104
Area II - Light	22.208	23.730	27.713	26.912	27.577
Area III - Medium	90.700	93.096	95.454	98.344	105.913
Area IV - Medium	101.844	103.600	106.070	109.997	110.352
Area IV - Light	124.200	130.043	133.069	137.877	141.076
PROVINCIAL TOTAL	418.890	434.617	446.109	459.986	479.441
REMAINING ESTABLISHED RESERVES (Million Cubic Metres)					
Area I - Heavy	27.268	28.074	24.491	23.091	22.762
Area II - Heavy	8.611	8.180	7.868	8.434	12.731
Area II - Light	8.836	9.137	11.906	10.063	9.660
Area III - Medium	14.587	15.205	15.804	16.797	22.387
Area IV - Medium	24.442	24.186	24.441	27.061	25.033
Area IV - Light	24.031	27.144	27.419	28.088	28.127
PROVINCIAL TOTAL	107.775	111.926	111.729	113.532	120.700
YEARLY PRODUCTION (Million Cubic Metres)					
Area I - Heavy	2.780	3.083	2.956	2.865	2.826
Area II - Heavy	0.801	0.771	0.768	0.829	0.855
Area II - Light	0.950	1.218	1.208	1.035	1.060
Area III - Medium	1.811	1.781	1.757	1.898	1.978
Area IV - Medium	1.949	2.047	2.140	2.463	2.454
Area IV - Light	2.502	2.703	2.842	2.944	3.069
PROVINCIAL TOTAL	10.793	11.583	11.869	12.034	12.242
NUMBER OF PRODUCING WELLS					
Area I - Heavy	3 531	4 098	3 874	3 659	3 842
Area II - Heavy	794	892	844	811	836
Area II - Light	2 818	3 750	3 888	4 015	4 232
Area III - Medium	1 116	1 279	1 263	1 267	1 324
Area IV - Medium	1 910	2 240	2 354	2 393	2 462
Area IV - Light	2 785	3 179	3 278	3 308	3 477
PROVINCIAL TOTAL	12 954	15 438	15 501	15 453	15 973
AVERAGE DECEMBER PRODUCTION (Cubic Metres Per Day)					
Area I - Heavy	7 730	9 225	8 086	8 323	7 409
Area II - Heavy	2 127	2 073	2 187	2 324	2 319
Area II - Light	2 824	3 652	3 025	2 932	2 652
Area III - Medium	4 495	4 751	5 402	5 373	5 535
Area IV - Medium	5 479	4 706	6 059	6 096	6 631
Area IV - Light	7 251	7 426	8 065	8 326	8 177
PROVINCIAL TOTAL	29 906	31 833	32 784	33 374	32 723

OIL RESERVES

POOL	PRODUCING HORIZON	INITIAL OIL IN PLACE MILLION CUBIC METRES	ESTIMATED RECOVERY PRIMARY	ENHANCED	TOTAL	INITIAL RESERVES PRIMARY	ENHANCED	TOTAL	CUMULATIVE PROD. DEC 31/88	REMAINING RESERVES	1988 PROD $1000\ m^3$
			----------PER CENT----------			----------MILLION CUBIC METRES----------					
AREA I - HEAVY											
ABERFELDY	G.P. SAND	0.143	0.00	19.00	19.00	0.000	0.027	0.027	0.016	0.011	13.727
	SPARKY SAND (UNIT)	55.702	8.00	1.80	9.80	4.456	1.003	5.459	5.327	0.132	76.636
	SPARKY SAND (S. ABFDY SPKY VOL UNIT)	23.605	6.10	1.00	7.10	1.440	0.236	1.676	1.520	0.156	22.328
	SPARKY SAND (NON-UNIT)	18.131	2.70	0.00	2.70	0.490	0.000	0.490	0.360	0.130	18.932
BALDWINTON	SPARKY SAND	2.695	3.00	0.00	3.00	0.081	0.000	0.081	0.059	0.022	3.880
BIG GULLY	MCLAREN SAND (VOLUNTARY UNIT NO. 1)	9.860	5.70	2.30	8.00	0.562	0.227	0.789	0.803	0.085	12.999
	WASECA SAND (VOLUNTARY UNIT NO. 1)	3.693	1.80	0.90	2.70	0.066	0.033	0.099			
	MCLAREN SAND (NON-UNIT)	1.742	1.80	0.00	1.80	0.031	0.000	0.031	0.030	0.001	0.654
	WASECA SAND (NON-UNIT)	0.351	4.50	0.00	4.50	0.016	0.000	0.016	0.013	0.003	0.616
BIG CULLY NORTH	LLOYDMINSTER SAND	2.360	1.00	0.00	1.00	0.024	0.000	0.024	0.021	0.003	0.919
BUZZARD	LLOYDMINSTER SAND	5.237	4.30	0.00	4.30	0.225	0.000	0.225	0.149	0.076	16.431
CELTIC	G.P. SAND	33.768	5.70	0.60	6.30	1.925	0.203	2.128	0.527		105.784
	SPARKY SAND	46.864	1.50	0.00	1.50	0.703	0.000	0.703	0.211	2.967	36.382
	WASECA SAND	91.490	1.30	0.40	1.70	1.189	0.366	1.555	0.644		110.589
	MANNVILLE SANDS (COMMINGLED)	0.000	0.00	0.00	0.00	0.000	0.000	0.000	0.037		5.948
DEE VALLEY	WASECA SAND	19.209	6.50	0.00	6.50	1.249	0.000	1.249	0.418	0.831	40.394
DEE VALLEY EAST	SPARKY SAND	17.969	0.70	0.00	0.70	0.126	0.000	0.126	0.032		2.947
	WASECA SAND	10.145	3.30	0.00	3.30	0.335	0.000	0.335	0.075	0.337	9.363
	MANNVILLE SANDS (COMMINGLED)	0.000	0.00	0.00	0.00	0.000	0.000	0.000	0.017		4.419
DULWICH	SPARKY SAND	14.996	8.00	3.50	11.50	1.200	0.525	1.725	1.688	0.037	14.587
DULWICH NORTH	SPARKY SAND (N. DULWICH VOL UNIT)	1.341	4.50	11.50	16.00	0.060	0.154	0.214	0.211	0.003	0.702
	SPARKY SAND (NON-UNIT)	0.896	0.20	0.00	0.20	0.002	0.000	0.002	0.002	0.000	0.317
EAR LAKE	WASECA SAND	1.246	8.00	0.00	8.00	0.100	0.000	0.100	0.037	0.063	8.110
EDAM	WASECA SAND	11.225	0.65	0.00	0.65	0.073	0.000	0.073	0.037	0.036	1.511
EDAM WEST	SPARKY/G.P. SAND	26.705	4.00	0.00	4.00	1.068	0.000	1.068	0.378		74.892
	WASECA SAND	14.040	5.50	0.00	5.50	0.772	0.000	0.772	0.202	1.160	61.043
	MANNVILLE SANDS (COMMINGLED)	0.000	0.00	0.00	0.00	0.000	0.000	0.000	0.100		22.810
EPPING	G.P. SAND (S. EPPING UNIT)	4.310	3.00	1.80	4.80	0.129	0.078	0.207	2.594	0.340	37.355
	SPARKY SAND (S. EPPING UNIT)	23.924	5.00	6.40	11.40	1.196	1.531	2.727			
	SPARKY SAND (SW EPPING VOL UNIT 1)	10.778	5.40	4.50	9.90	0.582	0.485	1.067	0.912	0.155	20.106
	G.P. SAND (NON-UNIT)	19.541	2.50	0.00	2.50	0.489	0.000	0.489	0.410	0.079	11.985
	SPARKY SAND (NON-UNIT)	38.130	4.90	0.00	4.90	1.868	0.000	1.868	1.674	0.194	41.913
EVESHAM	SPARKY SAND	3.083	4.80	0.00	4.80	0.148	0.000	0.148	0.070	0.078	11.261
EVESHAM NORTH	MCLAREN SAND	1.073	3.20	0.00	3.20	0.034	0.000	0.034	0.015	0.019	4.039
	SPARKY SAND	1.426	10.00	0.00	10.00	0.143	0.000	0.143	0.072	0.071	10.774
EYEHILL	CUMMINGS SAND	10.228	1.00	2.90	3.90	0.102	0.297	0.399	0.194	0.205	26.157
FOREST BANK	SPARKY SAND	13.166	2.80	0.00	2.80	0.369	0.000	0.369	0.168		8.984
	WASECA SAND	8.960	3.90	0.00	3.90	0.349	0.000	0.349	0.173	0.299	10.357
	MANNVILLE SANDS (COMMINGLED)	0.000	0.00	0.00	0.00	0.000	0.000	0.000	0.078		5.641
FREEMONT	SPARKY SAND	3.467	6.50	0.00	6.50	0.225	0.000	0.225	0.121	0.104	14.679
	WASECA SAND	3.928	5.50	0.00	5.50	0.216	0.000	0.216	0.171	0.045	9.799
FURNESS	SPARKY SAND	11.305	5.20	0.00	5.20	0.588	0.000	0.588	0.439	0.149	17.649
GOLDEN LAKE NORTH	SPARKY SAND (GOLDEN LAKE VOL UNIT)	11.403	4.20	0.70	4.90	0.479	0.080	0.559	1.618	0.224	36.203
	WASECA SAND (GOLDEN LAKE VOL UNIT)	13.950	7.60	1.60	9.20	1.060	0.223	1.283			
	SPARKY SAND (NON-UNIT)	11.121	2.40	0.00	2.40	0.267	0.000	0.267	0.162		16.616
	WASECA SAND (NON-UNIT)	11.315	3.60	0.00	3.60	0.407	0.000	0.407	0.338	0.138	6.949
	MANNVILLE SANDS (COMMINGLED)	0.000	0.00	0.00	0.00	0.000	0.000	0.000	0.036		3.658
GOLDEN LAKE SOUTH	SPARKY SAND	42.841	0.90	1.20	2.10	0.386	0.514	0.900	0.703		15.375
	WASECA SAND	24.534	10.20	0.20	10.40	2.502	0.049	2.551	1.727	0.925	85.314
	MANNVILLE SANDS (COMMINGLED)	0.000	0.00	0.00	0.00	0.000	0.000	0.000	0.096		6.796
GULLY LAKE	WASECA SAND (VOLUNTARY UNIT NO. 1)	10.986	7.00	4.40	11.40	0.769	0.483	1.252	0.835	0.417	40.830
	WASECA SAND (NON-UNIT)	18.161	7.30	0.00	7.30	1.326	0.000	1.326	0.859	0.467	56.358
HILLMOND	G.P. SAND	2.165	0.30	0.00	0.30	0.006	0.000	0.006	0.006	0.000	0.301
	SPARKY SAND	2.301	1.50	0.00	1.50	0.035	0.000	0.035	0.015	0.020	2.415

OIL RESERVOIR DATA

DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY ----PER CENT----	AVERAGE CONNATE WATER ----PER CENT----	FORMATION VOLUME FACTOR	OIL DENSITY KG/M^3	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
									AREA I - HEAVY	
16	4.35	28.0	25.0	1.020	968	537	CRETACEOUS	1981	ABERFELDY	G.P. SAND
4209	4.42	35.0	13.0	1.017	968	535	CRETACEOUS	1956		SPARKY SAND (UNIT)
1522	5.18	35.0	13.0	1.017	968	535	CRETACEOUS	1956		SPARKY SAND (S. ABFDY SPKY VOL UNIT)
1101	5.50	35.0	13.0	1.017	968	535	CRETACEOUS	1956		SPARKY SAND (NON-UNIT)
372	4.60	25.0	30.0	1.111	970	509	CRETACEOUS	1969	BALDWINTON	SPARKY SAND
1101	2.99	36.0	15.3	1.018	965	496	CRETACEOUS	1962	BIG GULLY	MCLAREN SAND (VOLUNTARY UNIT NO. 1)
518	2.38	36.0	15.3	1.018	965	479	CRETACEOUS	1962		WASECA SAND (VOLUNTARY UNIT NO. 1)
162	3.59	36.0	15.3	1.018	981	496	CRETACEOUS	1962		MCLAREN SAND (NON-UNIT)
16	7.32	36.0	15.3	1.018	972	479	CRETACEOUS	1962		WASECA SAND (NON-UNIT)
178	5.52	35.0	30.0	1.020	975	542	CRETACEOUS	1973	BIG GULLY NORTH	LLOYDMINSTER SAND
809	4.11	25.0	30.0	1.111	971	579	CRETACEOUS	1978	BUZZARD	LLOYDMINSTER SAND
2697	5.34	35.0	31.0	1.030	969	477	CRETACEOUS	1968	CELTIC	G.P. SAND
4130	4.30	35.0	24.0	1.008	975	463	CRETACEOUS	1968		SPARKY SAND
5106	6.79	35.0	24.0	1.008	968	451	CRETACEOUS	1968		WASECA SAND
0	0.00	0.0	0.0	1.008	–	–	CRETACEOUS	–		MANNVILLE SANDS (COMMINGLED)
1736	3.82	35.0	16.0	1.015	976	460	CRETACEOUS	1967	DEE VALLEY	WASECA SAND
1306	4.75	35.0	16.0	1.015	969	490	CRETACEOUS	1968	DEE VALLEY EAST	SPARKY SAND
1119	3.13	35.0	16.0	1.015	971	464	CRETACEOUS	1970		WASECA SAND
0	0.00	0.0	0.0	1.015	–	–	CRETACEOUS	–		MANNVILLE SANDS (COMMINGLED)
1882	3.11	34.0	15.0	1.116	962	556	CRETACEOUS	1948	DULWICH	SPARKY SAND
113	3.96	35.0	13.0	1.016	957	551	CRETACEOUS	1954	DULWICH NORTH	SPARKY SAND (N. DULWICH VOL UNIT)
49	6.10	35.0	13.0	1.016	957	551	CRETACEOUS	1954		SPARKY SAND (NON-UNIT)
194	2.91	35.0	30.0	1.110	977	656	CRETACEOUS	1979	EAR LAKE	WASECA SAND
1008	7.07	25.0	30.0	1.111	988	431	CRETACEOUS	1972	EDAM	WASECA SAND
1634	8.07	30.0	25.0	1.111	973	467	CRETACEOUS	1982	EDAM WEST	SPARKY/G.P. SAND
1764	3.93	30.0	25.0	1.111	978	447	CRETACEOUS	1982		WASECA SAND
0	0.00	0.0	0.0	1.111	–	–	CRETACEOUS	–		MANNVILLE SANDS (COMMINGLED)
1473	1.04	35.0	18.0	1.020	962	583	CRETACEOUS	1951	EPPING	G.P. SAND (S. EPPING UNIT)
1651	5.15	35.0	18.0	1.020	964	563	CRETACEOUS	1951		SPARKY SAND (S. EPPING UNIT)
923	4.15	35.0	18.0	1.020	964	563	CRETACEOUS	1951		SPARKY SAND (SW EPPING VOL UNIT 1)
2315	3.00	35.0	18.0	1.020	962	583	CRETACEOUS	1951		G.P. SAND (NON-UNIT)
2948	4.60	35.0	18.0	1.020	968	563	CRETACEOUS	1951		SPARKY SAND (NON-UNIT)
469	2.52	35.0	23.0	1.033	958	719	CRETACEOUS	1969	EVESHAM	SPARKY SAND
178	2.59	35.0	30.0	1.053	969	688	CRETACEOUS	1982	EVESHAM NORTH	MCLAREN SAND
243	2.25	35.0	23.0	1.033	951	734	CRETACEOUS	1978		SPARKY SAND
376	9.82	34.0	16.0	1.031	970	748	CRETACEOUS	1971	EYEHILL	CUMMINGS SAND
1295	3.51	35.0	16.0	1.015	982	526	CRETACEOUS	1981	FOREST BANK	SPARKY SAND
1093	2.83	35.0	16.0	1.015	979	507	CRETACEOUS	1983		WASECA SAND
0	0.00	0.0	0.0	1.015	–	–	CRETACEOUS	–		MANNVILLE SANDS (COMMINGLED)
469	2.78	35.0	20.0	1.053	963	636	CRETACEOUS	1976	FREEMONT	SPARKY SAND
469	3.15	35.0	20.0	1.053	958	620	CRETACEOUS	1976		WASECA SAND
745	5.34	34.0	15.0	1.017	967	566	CRETACEOUS	1970	FURNESS	SPARKY SAND
1198	3.43	35.0	20.0	1.009	977	506	CRETACEOUS	1984	GOLDEN LAKE NORTH	SPARKY SAND (GOLDEN LAKE VOL UNIT)
1198	4.02	35.0	16.0	1.015	964	481	CRETACEOUS	1984		WASECA SAND (GOLDEN LAKE VOL UNIT)
1092	3.67	35.0	20.0	1.009	970	506	CRETACEOUS	1984		SPARKY SAND (NON-UNIT)
939	4.16	35.0	16.0	1.015	963	481	CRETACEOUS	1984		WASECA SAND (NON-UNIT)
0	0.00	0.0	0.0	1.009	–	–	CRETACEOUS	–		MANNVILLE SANDS (COMMINGLED)
2962	5.10	35.0	18.0	1.012	978	490	CRETACEOUS	1984	GOLDEN LAKE SOUTH	SPARKY SAND
2881	2.94	35.0	16.0	1.015	966	473	CRETACEOUS	1984		WASECA SAND
0	0.00	0.0	0.0	1.015	–	–	CRETACEOUS	–		MANNVILLE SANDS (COMMINGLED)
874	4.33	35.7	16.0	1.033	963	472	CRETACEOUS	1949	GULLY LAKE	WASECA SAND (VOLUNTARY UNIT NO. 1)
1380	4.60	35.7	16.0	1.033	969	472	CRETACEOUS	1949		WASECA SAND (NON-UNIT)
243	3.71	35.0	30.0	1.020	970	507	CRETACEOUS	1977	HILLMOND	G.P. SAND
340	2.84	35.0	30.0	1.028	970	494	CRETACEOUS	1977		SPARKY SAND

OIL RESERVES

POOL	PRODUCING HORIZON	INITIAL OIL IN PLACE MILLION CUBIC METRES	ESTIMATED RECOVERY PRIMARY	ENHANCED	TOTAL	INITIAL RESERVES PRIMARY	ENHANCED	TOTAL	CUMULATIVE PROD. DEC 31/88	REMAINING RESERVES	1988 PROD $1000\ m^3$
			PER CENT			MILLION CUBIC METRES					
LANDROSE	MCLAREN SAND	5.240	2.50	0.00	2.50	0.131	0.000	0.131	0.126	0.005	2.043
	WASECA SAND	3.281	3.60	0.00	3.60	0.118	0.000	0.118	0.117	0.001	1.119
LASHBURN	WASECA SAND (LASH. WASECA VOL UNIT)	18.059	3.60	3.60	7.20	0.650	0.650	1.300	0.915	0.385	42.507
	WASECA SAND (NON-UNIT)	9.026	2.30	0.00	2.30	0.208	0.000	0.208	0.158	0.050	7.712
LASHBURN SOUTH	SPARKY SAND	2.794	1.40	0.00	1.40	0.039	0.000	0.039	0.030	0.009	1.900
	WASECA SAND	9.560	4.60	0.00	4.60	0.440	0.000	0.440	0.227	0.213	28.184
LASHBURN WEST	SPARKY SAND	11.082	0.90	0.00	0.90	0.100	0.000	0.100	0.046	0.054	3.191
LLOYDMINSTER	SPARKY SAND	4.343	4.00	0.00	4.00	0.174	0.000	0.174	0.162	0.012	6.733
LONE ROCK	SPARKY SAND	13.732	7.80	2.70	10.50	1.071	0.371	1.442	1.359	0.083	35.763
LOW LAKE	WASECA SAND	1.320	6.30	0.00	6.30	0.083	0.000	0.083	0.067	0.016	4.355
MACKLIN	SPARKY SAND	9.437	5.70	0.40	6.10	0.538	0.038	0.576	0.392	0.184	21.504
MAIDSTONE	MCLAREN SAND	7.372	6.50	0.00	6.50	0.479	0.000	0.479	0.208	0.271	23.523
	WASECA SAND	2.389	2.50	0.00	2.50	0.060	0.000	0.060	0.043	0.017	3.491
MANITO LAKE	SPARKY SAND	8.344	8.00	0.00	8.00	0.668	0.000	0.668	0.278	0.390	41.823
MARSDEN	SPARKY SAND	1.969	5.60	0.00	5.60	0.110	0.000	0.110	0.109	0.001	1.622
MARSDEN SOUTH	SPARKY SAND (VOL UNIT NO. 1)	10.830	4.60	18.50	23.10	0.498	2.004	2.502	0.468	2.034	81.990
	SPARKY SAND (NON-UNIT)	4.593	12.70	0.00	12.70	0.583	0.000	0.583	0.147	0.436	46.488
NEILBURG	MCLAREN SAND	10.042	11.70	0.00	11.70	1.175	0.000	1.175	0.529	0.646	83.331
NORTHMINSTER	SPARKY SAND (NORTH. SPARKY VOL UNIT)	10.939	3.50	4.00	7.50	0.383	0.438	0.821	0.788	0.033	10.929
	SPARKY SAND (NON-UNIT)	8.559	1.60	0.20	1.80	0.137	0.017	0.154	0.122	0.032	9.131
NORTHMINSTER NORTH	G.P. SAND	2.248	0.60	0.00	0.60	0.013	0.000	0.013	0.012	0.001	0.087
	SPARKY SAND	6.815	4.20	0.00	4.20	0.286	0.000	0.286	0.096	0.190	12.708
PIKES PEAK	G.P. SAND	4.794	5.70	0.00	5.70	0.273	0.000	0.273	0.218	0.055	8.986
	SPARKY SAND	2.286	0.50	0.00	0.50	0.011	0.000	0.011	0.010	0.001	0.471
	WASECA SAND	19.682	1.50	11.20	12.70	0.295	2.204	2.499	1.685	0.814	267.752
RUSH LAKE	SPARKY SAND	13.316	3.20	0.00	3.20	0.426	0.000	0.426	0.106		15.192
	WASECA SAND	10.150	3.50	0.00	3.50	0.355	0.000	0.355	0.065	0.573	13.216
	MANNVILLE SANDS (COMMINGLED)	0.000	0.00	0.00	0.00	0.000	0.000	0.000	0.037		14.601
SALT LAKE	LLOYDMINSTER SAND	9.310	9.50	0.00	9.50	0.884	0.000	0.884	0.303	0.581	56.834
SENLAC	LLOYDMINSTER SAND	11.901	5.20	0.30	5.50	0.619	0.036	0.655	0.535	0.120	39.066
SILVERDALE	SPARKY SAND	20.075	6.20	0.80	7.00	1.245	0.161	1.406	1.322	0.084	25.533
STANDARD HILL	WASECA SAND	20.892	7.50	0.00	7.50	1.567	0.000	1.567	1.139	0.428	61.966
TANGLEFLAGS	LLOYDMINSTER SAND (VOL UNIT NO. 2)	4.001	5.50	3.20	8.70	0.220	0.128	0.348	0.264	0.084	12.095
	G.P. SAND (VOL UNIT NO. 3)	4.857	5.90	0.00	5.90	0.287	0.000	0.287	0.165	0.122	16.577
	LLOYDMINSTER SAND (VOL UNIT NO. 3)	5.743	4.30	0.00	4.30	0.247	0.000	0.247	0.206	0.041	11.380
	MCLAREN SAND (VOL UNIT NO. 3)	0.212	3.80	0.00	3.80	0.008	0.000	0.008	0.008	0.000	0.004
	SPARKY SAND (VOL UNIT NO. 3)	4.857	0.76	0.00	0.76	0.037	0.000	0.037	0.029	0.008	1.054
	G.P. SAND (NON-UNIT)	45.242	5.59	0.35	5.94	2.529	0.158	2.687	1.539		88.524
	LLOYDMINSTER SAND (NON-UNIT)	43.626	3.81	0.00	3.81	1.662	0.000	1.662	0.961		60.544
	MCLAREN SAND (NON-UNIT)	6.507	2.80	0.00	2.80	0.182	0.000	0.182	0.069	2.022	4.807
	SPARKY SAND (NON-UNIT)	13.012	5.12	0.00	5.12	0.666	0.000	0.666	0.278		23.450
	MANNVILLE SD (COMMINGLED) (NON-UNIT)	0.000	0.00	0.00	0.00	0.000	0.000	0.000	0.328		28.316
TANGLEFLAGS EAST	MCLAREN SAND	1.870	6.00	0.00	6.00	0.112	0.000	0.112	0.071	0.041	5.217
TANGLEFLAGS NORTH	G.P. SAND	3.676	0.60	0.00	0.60	0.022	0.000	0.022	0.016	0.006	2.081
	LLOYDMINSTER/CUMMINGS SAND	24.949	3.00	0.90	3.90	0.748	0.225	0.973	0.420	0.553	82.750
TANGLEFLAGS WEST	G.P. SAND	2.404	0.80	0.00	0.80	0.019	0.000	0.019	0.013		0.998
	LLOYDMINSTER SAND	4.593	2.80	0.00	2.80	0.129	0.000	0.129	0.098		8.010
	MCLAREN SAND	0.613	1.50	0.00	1.50	0.009	0.000	0.009	0.008	0.067	0.472
	SPARKY SAND	1.913	4.80	0.00	4.80	0.088	0.000	0.088	0.059		4.466
	MANNVILLE SANDS (COMMINGLED)	0.000	0.00	0.00	0.00	0.000	0.000	0.000	0.002		1.226
WESTHAZEL	G.P. SAND	8.748	2.70	0.00	2.70	0.236	0.000	0.236	0.105	0.131	17.782
	SPARKY SAND	8.863	3.70	0.00	3.70	0.321	0.000	0.321	0.166	0.155	22.116
WINTER	CUMMINGS SAND	4.876	1.07	0.00	1.07	0.052	0.000	0.052	0.029	0.023	2.984
MISCELLANEOUS	BIRDBEAR	0.084	6.00	0.00	6.00	0.005	0.000	0.005	0.002	0.003	0.839
	COLONY SAND	5.598	1.93	0.00	1.93	0.127	0.000	0.127	0.074	0.053	10.734
	CUMMINGS SAND	10.893	0.81	0.00	0.81	0.088	0.000	0.088	0.060	0.028	6.734

OIL RESERVOIR DATA

DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY —PER CENT—	AVERAGE CONNATE WATER —PER CENT—	FORMATION VOLUME FACTOR	OIL DENSITY KG/M^3	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
550	4.18	30.0	20.0	1.053	981	513	CRETACEOUS	1950	LANDROSE	MCLAREN SAND
308	3.67	36.0	18.0	1.017	963	521	CRETACEOUS	1950		WASECA SAND
1263	6.22	30.0	21.0	1.031	962	518	CRETACEOUS	1960	LASHBURN	WASECA SAND (LASH. WASECA VOL UNIT)
631	4.89	35.0	15.0	1.017	963	518	CRETACEOUS	1960		WASECA SAND (NON-UNIT)
453	2.24	35.0	20.0	1.017	963	534	CRETACEOUS	1967	LASHBURN SOUTH	SPARKY SAND
712	4.59	35.0	15.0	1.017	979	524	CRETACEOUS	1971		WASECA SAND
1551	4.54	25.0	30.0	1.111	991	537	CRETACEOUS	1979	LASHBURN WEST	SPARKY SAND
259	5.60	35.0	13.0	1.017	965	556	CRETACEOUS	1952	LLOYDMINSTER	SPARKY SAND
939	5.49	33.0	15.0	1.053	960	572	CRETACEOUS	1947	LONE ROCK	SPARKY SAND
148	3.65	36.0	30.0	1.017	971	509	CRETACEOUS	1950	LOW LAKE	WASECA SAND
1325	2.73	35.0	23.0	1.033	947	712	CRETACEOUS	1976	MACKLIN	SPARKY SAND
1766	2.65	25.0	30.0	1.111	983	500	CRETACEOUS	1976	MAIDSTONE	MCLAREN SAND
534	2.84	25.0	30.0	1.111	973	503	CRETACEOUS	1981		WASECA SAND
1308	4.05	25.0	30.0	1.111	965	605	CRETACEOUS	1970	MANITO LAKE	SPARKY SAND
182	4.57	35.0	20.0	1.053	962	608	CRETACEOUS	1949	MARSDEN	SPARKY SAND
518	9.58	30.0	25.0	1.031	946	625	CRETACEOUS	1979	MARSDEN SOUTH	SPARKY SAND (VOL UNIT NO. 1)
389	5.41	30.0	25.0	1.031	946	625	CRETACEOUS	1975		SPARKY SAND (NON-UNIT)
1345	3.95	30.0	30.0	1.111	964	570	CRETACEOUS	1978	NEILBURG	MCLAREN SAND
987	3.90	34.0	15.0	1.017	976	541	CRETACEOUS	1959	NORTHMINSTER	SPARKY SAND (NORTH. SPARKY VOL UNIT)
502	6.00	34.0	15.0	1.017	967	541	CRETACEOUS	1959		SPARKY SAND (NON-UNIT)
453	3.15	25.0	30.0	1.111	984	543	CRETACEOUS	1981	NORTHMINSTER NORTH	G.P. SAND
953	4.54	25.0	30.0	1.111	970	524	CRETACEOUS	1981		SPARKY SAND
680	3.03	35.0	30.0	1.053	970	530	CRETACEOUS	1970	PIKES PEAK	G.P. SAND
599	1.84	35.0	30.0	1.053	984	515	CRETACEOUS	1973		SPARKY SAND
842	8.50	33.0	15.0	1.020	978	497	CRETACEOUS	1970		WASECA SAND
2067	4.09	25.0	30.0	1.111	978	478	CRETACEOUS	1971	RUSH LAKE	SPARKY SAND
1665	3.87	25.0	30.0	1.111	977	450	CRETACEOUS	1971		WASECA SAND
0	0.00	0.0	0.0	1.111	–	–	CRETACEOUS	–		MANNVILLE SANDS (COMMINGLED)
1485	2.88	26.0	20.0	1.029	970	737	CRETACEOUS	1985	SALT LAKE	LLOYDMINSTER SAND
1462	4.75	26.0	32.0	1.111	968	787	CRETACEOUS	1980	SENLAC	LLOYDMINSTER SAND
2056	3.78	34.0	20.0	1.053	965	564	CRETACEOUS	1968	SILVERDALE	SPARKY SAND
2074	3.58	34.0	18.0	1.015	968	472	CRETACEOUS	1963	STANDARD HILL	WASECA SAND
421	4.09	30.0	21.0	1.020	959	532	CRETACEOUS	1985	TANGLEFLAGS	LLOYDMINSTER SAND (VOL UNIT NO. 2)
567	3.20	33.3	18.0	1.020	969	490	CRETACEOUS	1971		G.P. SAND (VOL UNIT NO. 3)
833	3.36	30.8	31.8	1.020	960	532	CRETACEOUS	1985		LLOYDMINSTER SAND (VOL UNIT NO. 3)
32	2.85	35.0	30.0	1.053	970	443	CRETACEOUS	1985		MCLAREN SAND (VOL UNIT NO. 3)
627	3.25	35.0	30.0	1.028	970	511	CRETACEOUS	1969		SPARKY SAND (VOL UNIT NO. 3)
3113	5.43	35.0	22.0	1.020	970	492	CRETACEOUS	1971		G.P. SAND (NON-UNIT)
4461	3.80	35.0	25.0	1.020	962	532	CRETACEOUS	1985		LLOYDMINSTER SAND (NON-UNIT)
885	3.16	35.0	30.0	1.053	970	443	CRETACEOUS	1985		MCLAREN SAND (NON-UNIT)
1551	3.52	35.0	30.0	1.028	969	511	CRETACEOUS	1969		SPARKY SAND (NON-UNIT)
0	0.00	0.0	0.0	1.020	–	–	CRETACEOUS	–		MANNVILLE SD (COMMINGLED) (NON-UNIT)
291	4.08	25.0	30.0	1.111	973	359	CRETACEOUS	1978	TANGLEFLAGS EAST	MCLAREN SAND
291	5.43	35.0	30.0	1.053	978	450	CRETACEOUS	1977	TANGLEFLAGS NORTH	G.P. SAND
1183	8.78	35.0	30.0	1.020	970	515	CRETACEOUS	1977		LLOYDMINSTER/CUMMINGS SAND
130	6.91	35.0	22.0	1.020	979	516	CRETACEOUS	1972	TANGLEFLAGS WEST	G.P. SAND
453	3.94	35.0	25.0	1.020	967	563	CRETACEOUS	1972		LLOYDMINSTER SAND
65	4.05	35.0	30.0	1.053	980	462	CRETACEOUS	1978		MCLAREN SAND
178	4.51	35.0	30.0	1.028	975	498	CRETACEOUS	1972		SPARKY SAND
0	0.00	0.0	0.0	1.020	–	–	CRETACEOUS	–		MANNVILLE SANDS (COMMINGLED)
502	7.49	35.0	30.0	1.053	977	485	CRETACEOUS	1971	WESTHAZEL	G.P. SAND
744	5.28	35.0	30.0	1.111	967	455	CRETACEOUS	1969		SPARKY SAND
259	11.22	25.0	30.0	1.043	980	680	CRETACEOUS	1980	WINTER	CUMMINGS SAND
49	3.00	10.0	40.0	1.053	–	–	CRETACEOUS	–	MISCELLANEOUS	BIRDBEAR
582	4.79	35.0	30.0	1.053	–	–	CRETACEOUS	–		COLONY SAND
510	9.18	35.0	30.0	1.053	–	–	CRETACEOUS	–		CUMMINGS SAND

OIL RESERVES

POOL	PRODUCING HORIZON	INITIAL OIL IN PLACE MILLION CUBIC METRES	ESTIMATED RECOVERY PRIMARY	ESTIMATED RECOVERY ENHANCED	ESTIMATED RECOVERY TOTAL	INITIAL RESERVES PRIMARY	INITIAL RESERVES ENHANCED	INITIAL RESERVES TOTAL	CUMULATIVE PROD. DEC 31/88	REMAINING RESERVES	1988 PROD
			----PER CENT----			----MILLION CUBIC METRES----					1000 m^3
MISCELLANEOUS	DINA SAND	3.023	0.30	0.00	0.30	0.009	0.000	0.009	0.006	0.003	0.000
	G.P. SAND	24.842	2.70	0.00	2.70	0.671	0.000	0.671	0.437	0.234	44.822
	LLOYDMINSTER SAND	9.268	2.13	1.75	3.88	0.197	0.162	0.359	0.283	0.076	15.151
	MANNVILLE SAND	0.744	0.90	0.00	0.90	0.007	0.000	0.007	0.005	0.002	0.876
	MANNVILLE SANDS (COMMINGLED)	14.648	1.70	0.00	1.70	0.249	0.000	0.249	0.182	0.067	16.468
	MCLAREN SAND	11.980	1.98	0.00	1.98	0.237	0.000	0.237	0.170	0.067	17.016
	REX SAND	3.788	1.24	0.00	1.24	0.047	0.000	0.047	0.035	0.012	2.195
	SPARKY SAND	37.673	4.10	0.00	4.10	1.545	0.000	1.545	0.887	0.658	106.253
	WASECA SAND	30.567	3.50	0.00	3.50	1.070	0.000	1.070	0.465	0.605	88.270
	TOTAL AREA I HEAVY	**1334.370**				**55.313**	**13.106**	**68.419**	**45.657**	**22.762**	**2826.376**
AREA II - HEAVY											
ALSASK	BASAL MANNVILLE SAND	0.176	8.50	0.00	8.50	0.015	0.000	0.015	0.013	0.002	0.908
BUFFALO COULEE	BAKKEN SAND	5.082	2.50	8.20	10.70	0.127	0.417	0.544	0.330	0.214	26.009
BUFF. COULEE NORTH	BAKKEN SAND	3.342	2.30	0.90	3.20	0.077	0.030	0.107	0.072	0.035	3.233
CACTUS LAKE	BASAL MANNVILLE-BAKKEN (VOL UNIT 1)	4.453	11.20	14.20	25.40	0.499	0.632	1.131	0.342	0.789	20.746
	BASAL MANNVILLE-BAKKEN (VOL UNIT 2)	24.820	9.95	12.20	22.15	2.470	3.028	5.498	1.058	4.440	108.241
	BASAL MANNVILLE-BAKKEN (NON-UNIT)	2.691	12.20	0.00	12.20	0.328	0.000	0.328	0.197	0.131	20.447
COLEVILLE	BAKKEN SAND	50.877	4.60	16.30	20.90	2.340	8.293	10.633	7.134	3.499	198.892
	MANNVILLE SANDS	1.517	5.50	0.00	5.50	0.083	0.000	0.083	0.064	0.019	4.876
COLEVILLE SOUTH	BAKKEN SAND (UNIT)	4.154	3.27	0.00	3.27	0.146	0.000	0.146	0.124	0.022	19.298
	BAKKEN SAND (NON-UNIT)	2.147	8.20	0.00	8.20	0.176	0.000	0.176	0.051	0.125	12.903
	MANNVILLE SANDS	2.082	4.10	0.00	4.10	0.085	0.000	0.085	0.022	0.063	4.602
COSINE LAKE	LLOYDMINSTER SAND	7.487	0.70	0.00	0.70	0.052	0.000	0.052	0.049	0.003	3.988
COURT	BAKKEN SAND (VOLUNTARY UNIT)	8.786	6.30	4.67	10.97	0.554	0.410	0.964	0.354	0.610	73.820
	BAKKEN SAND (NON-UNIT)	1.278	4.60	0.00	4.60	0.059	0.000	0.059	0.025	0.034	9.800
DRUID	MANNVILLE SANDS	1.972	2.70	0.00	2.70	0.053	0.000	0.053	0.023	0.030	2.374
FUSILIER	BAKKEN SAND	3.530	13.60	0.00	13.60	0.480	0.000	0.480	0.216	0.264	18.681
HEARTS HILL	BAKKEN SAND	2.935	5.30	0.00	5.30	0.156	0.000	0.156	0.065	0.091	12.945
HOOSIER	BAKKEN SAND (VOLUNTARY UNIT NO. 1)	3.128	4.00	5.60	9.60	0.125	0.175	0.300	0.182	0.118	15.072
	BAKKEN SAND (NON-UNIT)	5.604	6.70	0.00	6.70	0.375	0.000	0.375	0.203	0.172	23.751
LOVERNA	DETRITAL	2.493	4.20	0.00	4.20	0.105	0.000	0.105	0.086	0.019	2.568
LUSELAND	BAKKEN SAND	16.780	4.50	0.00	4.50	0.755	0.000	0.755	0.227	0.528	42.550
NORTH HOOSIER	BAKKEN SAND (VOLUNTARY UNIT)	8.498	2.30	11.60	13.90	0.195	0.986	1.181	0.924	0.257	28.895
	BAKKEN SAND (NON-UNIT)	3.206	8.00	0.00	8.00	0.256	0.000	0.256	0.189	0.067	12.540
NORTH HOOSIER	BASAL MANNVILLE SAND (VOL UNIT)	4.147	6.00	12.20	18.20	0.249	0.506	0.755	0.642	0.113	18.060
	BASAL MANNVILLE SAND (NON-UNIT)	0.187	1.80	0.00	1.80	0.003	0.000	0.003	0.003	0.000	0.325
NORTH SMILEY	BAKKEN SAND	1.193	4.70	0.00	4.70	0.056	0.000	0.056	0.028	0.028	5.239
PLOVER LAKE	BAKKEN SAND	12.060	4.60	0.00	4.60	0.555	0.000	0.555	0.262	0.293	41.109
MISCELLANEOUS	BAKKEN SAND	13.993	3.30	0.00	3.30	0.462	0.000	0.462	0.192	0.270	32.595
	BASAL MANNVILLE SAND	5.584	1.50	0.00	1.50	0.084	0.000	0.084	0.033	0.051	11.736
	BIRDBEAR	0.080	6.30	0.00	6.30	0.005	0.000	0.005	0.004	0.001	0.345
	DETRITAL	4.618	2.50	0.00	2.50	0.115	0.000	0.115	0.058	0.057	10.426
	LLOYDMINISTER SAND	0.439	2.50	0.00	2.50	0.011	0.000	0.011	0.007	0.004	0.739
	MANNVILLE SAND	21.455	2.60	0.00	2.60	0.558	0.000	0.558	0.181	0.377	63.586
	MCLAREN SAND	0.068	20.70	0.00	20.70	0.014	0.000	0.014	0.009	0.005	1.257
	SPARKY SAND	0.079	5.10	0.00	5.10	0.004	0.000	0.004	0.004	0.000	0.561
	TOTAL AREA II HEAVY	**231.241**				**11.627**	**14.477**	**26.104**	**13.373**	**12.731**	**855.117**
AREA II - LIGHT											
AVON HILL	VIKING (VOL UNIT)	4.493	5.00	0.30	5.30	0.225	0.013	0.238	0.193	0.045	10.937
	VIKING (NON-UNIT)	4.013	7.30	0.00	7.30	0.293	0.000	0.293	0.247	0.046	11.687

OIL RESERVOIR DATA

DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY ---PER CENT---	AVERAGE CONNATE WATER ---PER CENT---	FORMATION VOLUME FACTOR	OIL DENSITY KG/M^3	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
178	7.30	35.0	30.0	1.053	–	–	CRETACEOUS	–	MISCELLANEOUS	DINA SAND
1910	5.59	35.0	30.0	1.053	–	–	CRETACEOUS	–		G.P. SAND
772	5.18	35.0	30.0	1.053	–	–	CRETACEOUS	–		LLOYDMINSTER SAND
41	7.80	35.0	30.0	1.053	–	–	CRETACEOUS	–		MANNVILLE SAND
765	8.23	35.0	30.0	1.053	–	–	CRETACEOUS	–		MANNVILLE SANDS (COMMINGLED)
1262	4.08	35.0	30.0	1.053	–	–	CRETACEOUS	–		MCLAREN SAND
243	6.70	35.0	30.0	1.053	–	–	CRETACEOUS	–		REX SAND
3848	4.21	35.0	30.0	1.053	–	–	CRETACEOUS	–		SPARKY SAND
2360	5.52	35.0	30.0	1.053	–	–	CRETACEOUS	–		WASECA SAND
									AREA II - HEAVY	
49	3.96	26.9	55.0	1.333	953	818	CRETACEOUS	1968	ALSASK	BASAL MANNVILLE SAND
719	3.72	26.6	25.0	1.050	978	823	MISSISSIPPIAN	1952	BUFFALO COULEE	BAKKEN SAND
275	6.10	30.0	31.0	1.039	981	814	MISSISSIPPIAN	1952	BUFF. COULEE NORTH	BAKKEN SAND
259	9.16	30.0	35.0	1.039	964	851	MISSISSIPPIAN	1974	CACTUS LAKE	BASAL MANNVILLE-BAKKEN (VOL UNIT 1)
2738	4.83	30.0	35.0	1.039	964	851	MISSISSIPPIAN	1974		BASAL MANNVILLE-BAKKEN (VOL UNIT 2)
211	6.39	31.9	35.0	1.039	964	851	MISSISSIPPIAN	1974		BASAL MANNVILLE-BAKKEN (NON-UNIT)
2873	11.48	24.1	31.0	1.078	982	823	MISSISSIPPIAN	1951	COLEVILLE	BAKKEN SAND
227	3.96	25.0	25.0	1.111	976	765	CRETACEOUS	1952		MANNVILLE SANDS
535	3.91	29.5	25.0	1.039	972	818	MISSISSIPPIAN	1983	COLEVILLE SOUTH	BAKKEN SAND (UNIT)
146	6.68	30.5	25.0	1.039	972	818	MISSISSIPPIAN	1983		BAKKEN SAND (NON-UNIT)
130	9.49	25.0	25.0	1.111	974	757	CRETACEOUS	1983		MANNVILLE SANDS
871	4.70	29.0	30.0	1.110	965	776	CRETACEOUS	1972	COSINE LAKE	LLOYDMINSTER SAND
583	7.30	28.5	23.0	1.063	953	863	MISSISSIPPIAN	1982	COURT	BAKKEN SAND (VOLUNTARY UNIT)
65	8.62	31.5	23.0	1.063	953	863	MISSISSIPPIAN	1982		BAKKEN SAND (NON-UNIT)
178	6.79	25.9	30.0	1.111	969	729	CRETACEOUS	1969	DRUID	MANNVILLE SANDS
247	7.69	25.4	22.0	1.066	962	799	MISSISSIPPIAN	1955	FUSILIER	BAKKEN SAND
275	5.43	27.6	25.0	1.053	953	758	MISSISSIPPIAN	1983	HEARTS HILL	BAKKEN SAND
228	5.88	31.5	22.0	1.053	975	865	MISSISSIPPIAN	1973	HOOSIER	BAKKEN SAND (VOLUNTARY UNIT NO. 1)
421	7.19	25.3	22.0	1.066	976	865	MISSISSIPPIAN	1973		BAKKEN SAND (NON-UNIT)
146	10.50	28.9	25.0	1.333	957	853	CRET.-JURASSIC	1952	LOVERNA	DETRITAL
615	12.20	31.4	25.0	1.053	963	739	MISSISSIPPIAN	1979	LUSELAND	BAKKEN SAND
452	9.40	30.0	30.0	1.050	958	878	MISSISSIPPIAN	1965	NORTH HOOSIER	BAKKEN SAND (VOLUNTARY UNIT)
259	7.23	23.4	22.0	1.066	958	878	MISSISSIPPIAN	1965		BAKKEN SAND (NON-UNIT)
313	6.80	28.0	27.0	1.049	970	838	CRETACEOUS	1964	NORTH HOOSIER	BASAL MANNVILLE SAND (VOL UNIT)
16	5.25	32.0	27.0	1.049	970	838	CRETACEOUS	1964		BASAL MANNVILLE SAND (NON-UNIT)
129	5.26	25.1	25.0	1.075	985	810	MISSISSIPPIAN	1981	NORTH SMILEY	BAKKEN SAND
583	9.22	31.5	25.0	1.053	987	817	MISSISSIPPIAN	1974	PLOVER LAKE	BAKKEN SAND
1037	7.13	26.9	25.0	1.066	–	–	MISSISSIPPIAN	–	MISCELLANEOUS	BAKKEN SAND
373	6.96	30.2	25.0	1.053	–	–	CRETACEOUS	–		BASAL MANNVILLE SAND
32	6.00	9.2	40.0	1.333	–	–	DEVONIAN	–		BIRDBEAR
356	9.37	26.4	30.0	1.335	–	–	CRET.-JURASSIC	–		DETRITAL
49	5.20	25.9	30.0	1.053	–	–	CRETACEOUS	–		LLOYDMINISTER SAND
1004	10.90	28.1	25.0	1.075	–	–	CRETACEOUS	–		MANNVILLE SAND
32	1.75	28.8	40.0	1.333	–	–	CRETACEOUS	–		MCLAREN SAND
16	2.00	30.0	15.0	1.033	–	–	CRETACEOUS	–		SPARKY SAND
									AREA II - LIGHT	
1586	2.47	23.0	45.0	1.103	844	725	CRETACEOUS	1959	AVON HILL	VIKING (VOL UNIT)
1440	2.43	23.0	45.0	1.103	844	725	CRETACEOUS	1959		VIKING (NON-UNIT)

OIL RESERVES

POOL	PRODUCING HORIZON	INITIAL OIL IN PLACE MILLION CUBIC METRES	ESTIMATED RECOVERY PRIMARY	ESTIMATED RECOVERY ENHANCED	ESTIMATED RECOVERY TOTAL	INITIAL RESERVES PRIMARY	INITIAL RESERVES ENHANCED	INITIAL RESERVES TOTAL	CUMULATIVE PROD. DEC 31/88	REMAINING RESERVES	1988 PROD
			PER CENT			MILLION CUBIC METRES					$1000\ m^3$
DODSLAND	VIKING (EAGLE LAKE VOL UNIT)	12.724	15.60	14.70	30.30	1.985	1.870	3.855	2.141	1.714	63.120
	VIKING (EAST DODS. VOL UNIT)	24.431	5.00	3.70	8.70	1.222	0.904	2.126	0.881	1.265	26.612
	VIKING (GLENEATH UNIT)	9.548	13.40	16.70	30.10	1.279	1.594	2.873	1.992	0.881	61.202
	VIKING (GLENEATH S. VOL UNIT)	0.396	15.60	1.80	17.40	0.062	0.007	0.069	0.042	0.027	2.348
	VIKING (KIYIU LAKE VOL UNIT)	2.323	6.50	0.00	6.50	0.151	0.000	0.151	0.079	0.072	11.530
	VIKING (KIYIU LAKE VOL UNIT NO. 2)	2.327	3.10	0.60	3.70	0.072	0.014	0.086	0.052	0.034	6.206
	VIKING (NORTH DODS. VOL UNIT)	7.253	4.60	4.40	9.00	0.334	0.319	0.653	0.207	0.446	14.785
	VIKING (NON-UNIT)	50.340	7.40	0.40	7.80	3.725	0.201	3.926	2.622	1.304	178.848
EUREKA	VIKING (NORTH EUREKA UNIT)	6.709	10.00	8.80	18.80	0.671	0.590	1.261	1.096	0.165	14.177
	VIKING (SOUTH EUREKA UNIT)	6.811	9.50	12.10	21.60	0.647	0.824	1.471	1.173	0.298	25.003
	VIKING (NON-UNIT)	6.190	2.90	0.00	2.90	0.180	0.000	0.180	0.128	0.052	14.282
FORGAN	VIKING	1.656	4.20	0.00	4.20	0.070	0.000	0.070	0.053	0.017	6.297
KERROBERT	VIKING	38.424	5.00	0.30	5.30	1.921	0.115	2.036	1.038	0.998	206.499
LUCKY HILLS	VIKING (VOLUNTARY UNIT)	1.573	6.00	0.00	6.00	0.094	0.000	0.094	0.074	0.020	2.516
	VIKING (NON-UNIT)	1.824	6.50	0.00	6.50	0.119	0.000	0.119	0.091	0.028	3.531
PLATO	VIKING (VOL UNIT NO. 1)	6.542	4.00	1.20	5.20	0.262	0.079	0.341	0.293	0.048	14.532
	VIKING (NON-UNIT)	2.704	2.00	0.00	2.00	0.054	0.000	0.054	0.042	0.012	10.722
PLATO NORTH	VIKING	16.032	5.90	0.00	5.90	0.946	0.000	0.946	0.447	0.499	96.705
PLENTY	VIKING	3.291	3.80	0.00	3.80	0.125	0.000	0.125	0.039	0.086	24.044
PRAIRIEDALE	VIKING	4.112	3.00	0.00	3.00	0.123	0.000	0.123	0.047	0.076	21.900
SMILEY-DEWAR	VIKING	25.720	15.00	5.80	20.80	3.858	1.492	5.350	4.391	0.959	83.978
VERENDRYE	VIKING	14.703	3.50	0.00	3.50	0.515	0.000	0.515	0.099	0.416	92.835
WHITESIDE	VIKING SAND (VOL UNIT)	2.668	10.00	0.10	10.10	0.267	0.003	0.270	0.258	0.012	4.288
	VIKING SAND (NON-UNIT)	4.873	3.70	0.00	3.70	0.180	0.000	0.180	0.140	0.040	23.080
MISCELLANEOUS	VIKING SAND	9.463	1.80	0.00	1.80	0.170	0.000	0.170	0.070	0.100	28.142
	VIKING CHERT	0.158	1.20	0.00	1.20	0.002	0.000	0.002	0.002	0.000	0.000
	TOTAL AREA II LIGHT	**271.299**				**19.552**	**8.025**	**27.577**	**17.917**	**9.660**	**1059.788**
AREA III - MEDIUM											
ANTELOPE LAKE	UPPER SHAUNAVON (VOL UNIT)	0.992	5.00	5.80	10.80	0.050	0.056	0.106	0.075	0.031	2.717
	UPPER SHAUNAVON (NON-UNIT)	0.031	5.20	0.00	5.20	0.002	0.000	0.002	0.002	0.000	0.000
ANTELOPE LAKE EAST	ROSERAY SAND	0.457	1.80	0.00	1.80	0.008	0.000	0.008	0.008	0.000	0.307
BATTLE CREEK	MADISON	0.428	3.95	0.00	3.95	0.017	0.000	0.017	0.017	0.000	0.000
BATTLE CREEK	UPPER SHAUNAVON	0.251	15.10	0.00	15.10	0.038	0.000	0.038	0.030	0.008	0.123
BATTLE CREEK SOUTH	UPPER SHAUNAVON	1.782	10.10	0.00	10.10	0.180	0.000	0.180	0.015	0.165	15.244
BATTRUM EAST	ROSERAY SAND	0.360	5.00	20.90	25.90	0.018	0.075	0.093	0.018	0.075	17.431
BATTRUM NORTH	ROSERAY SAND	2.743	6.60	0.00	6.60	0.181	0.000	0.181	0.102	0.079	12.382
BATTRUM	ROSERAY SAND (UNIT NO. 1)	29.044	10.00	22.20	32.20	2.904	6.448	9.352	5.056	4.296	148.586
	ROSERAY SAND (UNIT NO. 2)	5.990	6.60	39.70	46.30	0.395	2.378	2.773	1.355	1.418	72.701
	ROSERAY SAND (VOL UNIT NO. 3)	8.086	8.00	30.40	38.40	0.647	2.458	3.105	1.429	1.676	71.877
	ROSERAY SAND (UNIT NO. 4)	3.431	8.30	34.30	42.60	0.285	1.177	1.462	1.035	0.427	59.060
	ROSERAY SAND (NON-UNIT)	0.339	23.60	0.00	23.60	0.080	0.000	0.080	0.025	0.055	7.215
BENCH	UPPER SHAUNAVON	9.503	3.98	0.00	3.98	0.378	0.000	0.378	0.283	0.095	17.030
BEVERLEY	CANTUAR SAND	2.237	3.00	0.00	3.00	0.067	0.000	0.067	0.044	0.023	3.386
	CANTUAR SAND (VOL UNIT NO. 1)	6.243	10.09	7.29	17.38	0.630	0.455	1.085	0.450	0.635	17.023
BEVERLEY EAST	CANTUAR SAND	1.470	9.10	0.00	9.10	0.134	0.000	0.134	0.054	0.080	13.678
BEVERLEY NORTH	CANTUAR SAND (NON-UNIT)	0.287	2.80	0.00	2.80	0.008	0.000	0.008	0.005	0.003	1.309
	CANTUAR SAND (VOL UNIT NO. 1)	5.673	5.16	12.08	17.22	0.293	0.684	0.977	0.218	0.759	10.563
BEVERLEY	UPPER ROSERAY SAND (BEV. UNIT NO. 1)	4.036	15.00	28.50	43.50	0.605	1.150	1.755	1.617	0.138	23.957
	UPPER ROSERAY SAND (BEV. VOL UNIT 2)	1.499	9.70	8.50	18.20	0.145	0.127	0.272	0.085	0.187	14.134
	UPPER ROSERAY SAND (NON-UNIT)	0.081	21.00	0.00	21.00	0.017	0.000	0.017	0.017	0.000	0.210
BONE CREEK	UPPER SHAUNAVON (UNIT)	12.207	5.20	16.30	21.50	0.635	1.990	2.625	2.379	0.246	39.889
BUTTE	UPPER SHAUNAVON (VOLUNTARY UNIT)	8.918	5.50	20.30	25.80	0.490	1.810	2.300	0.943	1.357	81.150
	UPPER SHAUNAVON (NON-UNIT)	2.717	4.30	0.00	4.30	0.117	0.000	0.117	0.042	0.075	12.435

OIL RESERVOIR DATA

DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY ----PER	AVERAGE CONNATE WATER CENT----	FORMATION VOLUME FACTOR	OIL DENSITY KG/M^3	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
3772	3.02	22.4	45.0	1.103	840	671	CRETACEOUS	1956	DODSLAND	VIKING (EAGLE LAKE VOL UNIT)
6814	3.21	22.4	45.0	1.103	840	671	CRETACEOUS	1956		VIKING (EAST DODS. VOL UNIT)
3011	2.93	21.7	45.0	1.103	840	671	CRETACEOUS	1956		VIKING (GLENEATH UNIT)
129	2.75	22.4	45.0	1.103	840	671	CRETACEOUS	1956		VIKING (GLENEATH S. VOL UNIT)
842	2.47	22.4	45.0	1.103	840	671	CRETACEOUS	1956		VIKING (KIYIU LAKE VOL UNIT)
712	2.90	22.8	45.0	1.103	840	671	CRETACEOUS	1956		VIKING (KIYIU LAKE VOL UNIT NO. 2)
1910	3.40	22.4	45.0	1.103	840	671	CRETACEOUS	1956		VIKING (NORTH DODS. VOL UNIT)
18471	2.44	22.4	45.0	1.103	842	671	CRETACEOUS	1956		VIKING (NON-UNIT)
1683	3.32	23.0	42.0	1.111	853	724	CRETACEOUS	1954	EUREKA	VIKING (NORTH EUREKA UNIT)
1522	3.69	23.0	42.0	1.100	853	[illegible]	CRETACEOUS	1954		VIKING (SOUTH EUREKA UNIT)
1230	4.15	23.0	42.0	1.100	849	724	CRETACEOUS	1954		VIKING (NON-UNIT)
566	2.57	23.0	45.0	1.111	842	714	CRETACEOUS	1961	FORGAN	VIKING
16921	1.98	23.0	45.0	1.103	842	714	CRETACEOUS	1961	KERROBERT	VIKING
453	3.05	23.0	45.0	1.111	843	716	CRETACEOUS	1959	LUCKY HILLS	VIKING (VOLUNTARY UNIT)
566	3.10	21.0	45.0	1.111	843	716	CRETACEOUS	1959		VIKING (NON-UNIT)
1554	3.29	22.0	38.0	1.066	853	644	CRETACEOUS	1958	PLATO	VIKING (VOL UNIT NO. 1)
744	2.84	22.0	38.0	1.066	856	644	CRETACEOUS	1958		VIKING (NON-UNIT)
4530	2.83	23.0	35.0	1.111	865	705	CRETACEOUS	1978	PLATO NORTH	VIKING
1019	2.40	23.0	35.0	1.111	853	640	CRETACEOUS	1965	PLENTY	VIKING
938	3.85	23.0	45.0	1.111	870	743	CRETACEOUS	1964	PRAIRIEDALE	VIKING
4805	4.42	24.0	45.0	1.090	875	701	CRETACEOUS	1953	SMILEY-DEWAR	VIKING
3301	3.31	23.0	35.0	1.111	865	713	CRETACEOUS	1967	VERENDRYE	VIKING
1214	1.83	24.0	45.0	1.099	870	751	CRETACEOUS	1953	WHITESIDE	VIKING SAND (VOL UNIT)
2217	1.83	24.0	45.0	1.099	870	751	CRETACEOUS	1953		VIKING SAND (NON-UNIT)
2184	3.22	23.0	35.0	1.111	–	–	CRETACEOUS	–	MISCELLANEOUS	VIKING SAND
32	3.51	24.0	35.0	1.111	–	–	CRETACEOUS	–		VIKING CHERT
									AREA III - MEDIUM	
442	2.13	18.0	40.0	1.025	914	1037	JURASSIC	1964	ANTELOPE LAKE	UPPER SHAUNAVON (VOL UNIT)
16	1.83	17.0	40.0	0.976	914	1037	JURASSIC	1964		UPPER SHAUNAVON (NON-UNIT)
65	5.00	23.9	37.0	1.070	923	950	JURASSIC	1964	ANTELOPE LAKE EAST	ROSERAY SAND
49	7.62	16.0	25.0	1.047	997	1390	MISSISSIPPIAN	1966	BATTLE CREEK	MADISON
65	4.57	12.5	25.0	1.111	945	1337	JURASSIC	1966	BATTLE CREEK	UPPER SHAUNAVON
130	14.50	14.0	25.0	1.111	915	1305	JURASSIC	1966	BATTLE CREEK SOUTH	UPPER SHAUNAVON
81	2.99	25.1	39.3	1.024	938	913	JURASSIC	1967	BATTRUM EAST	ROSERAY SAND
259	7.58	24.3	41.0	1.026	937	886	JURASSIC	1979	BATTRUM NORTH	ROSERAY SAND
1599	10.73	26.0	33.2	1.026	936	883	JURASSIC	1955	BATTRUM	ROSERAY SAND (UNIT NO. 1)
324	9.75	27.4	29.0	1.026	–	883	JURASSIC	1955		ROSERAY SAND (UNIT NO. 2)
971	5.44	25.2	38.1	1.019	–	883	JURASSIC	1955		ROSERAY SAND (VOL UNIT NO. 3)
453	5.09	25.1	39.3	1.024	–	883	JURASSIC	1955		ROSERAY SAND (UNIT NO. 4)
49	4.68	25.0	39.3	1.026	–	883	JURASSIC	1955		ROSERAY SAND (NON-UNIT)
2024	4.29	13.7	15.0	1.064	915	1347	JURASSIC	1969	BENCH	UPPER SHAUNAVON
324	6.50	21.2	46.1	1.076	920	961	CRETACEOUS	1969	BEVERLEY	CANTUAR SAND
1230	4.30	25.1	49.4	1.076	920	920	CRETACEOUS	1969		CANTUAR SAND (VOL UNIT NO. 1)
550	1.83	25.2	30.0	1.076	927	975	CRETACEOUS	1965	BEVERLEY EAST	CANTUAR SAND
32	8.50	28.0	59.4	1.076	932	969	CRETACEOUS	1967	BEVERLEY NORTH	CANTUAR SAND (NON-UNIT)
1023	5.95	24.7	59.4	1.076	932	969	JURASSIC	1967		CANTUAR SAND (VOL UNIT NO. 1)
805	3.11	28.0	36.8	1.063	926	963	JURASSIC	1952	BEVERLEY	UPPER ROSERAY SAND (BEV. UNIT NO. 1)
316	2.90	24.4	28.0	1.074	926	963	JURASSIC	1952		UPPER ROSERAY SAND (BEV. VOL UNIT 2)
16	3.66	24.0	36.8	1.063	929	963	JURASSIC	1952		UPPER ROSERAY SAND (NON-UNIT)
1862	5.26	13.8	6.0	1.056	914	1341	JURASSIC	1954	BONE CREEK	UPPER SHAUNAVON (UNIT)
2137	2.54	22.8	25.0	1.041	914	1338	JURASSIC	1967	BUTTE	UPPER SHAUNAVON (VOLUNTARY UNIT)
453	4.73	17.8	25.0	1.041	914	1338	JURASSIC	1967		UPPER SHAUNAVON (NON-UNIT)

OIL RESERVES

POOL	PRODUCING HORIZON	INITIAL OIL IN PLACE MILLION CUBIC METRES	ESTIMATED RECOVERY PRIMARY	ENHANCED	TOTAL	INITIAL RESERVES PRIMARY	ENHANCED	TOTAL	CUMULATIVE PROD. DEC 31/88	REMAINING RESERVES	1989 PROD $1000\ m^3$
			PER CENT			MILLION CUBIC METRES					
CANTUAR EAST	CANTUAR SAND (UNIT NO. 1)	4.814	3.10	2.90	6.00	0.149	0.140	0.289	0.195	0.094	10.758
	CANTUAR SAND (UNIT NO. 2)	0.813	1.60	0.00	1.60	0.013	0.000	0.013	0.012	0.001	1.010
CANTUAR EAST	ROSERAY SAND (UNIT NO. 1)	2.899	6.80	2.30	9.10	0.197	0.067	0.264	0.220	0.044	5.956
	ROSERAY SAND (UNIT NO. 2)	1.969	11.40	1.90	13.30	0.227	0.038	0.265	0.235	0.030	4.390
	ROSERAY SAND (NON-UNIT)	0.014	1.00	0.00	1.00	0.000	0.000	0.000	0.000	0.000	0.029
CANTUAR	LOWER ROSERAY SAND (CANTUAR UNIT)	13.927	13.80	0.00	13.80	1.922	0.000	1.922	1.657	0.265	43.230
CANTUAR MAIN	CANTUAR SAND (CANTUAR UNIT)	22.107	8.70	11.90	20.60	1.923	2.631	4.554	4.046	0.508	89.617
	CANTUAR SAND (NON-UNIT)	0.111	6.30	0.00	6.30	0.007	0.000	0.007	0.004	0.003	0.832
CANTUAR NORTH	ROSERAY SAND	1.000	9.50	0.00	9.50	0.095	0.000	0.095	0.064	0.031	5.891
CHAMBERY	UPPER SHAUNAVON	1.739	6.20	0.00	6.20	0.108	0.000	0.108	0.066	0.042	5.466
CLINTONVILLE	SHAUNAVON	4.563	1.80	0.00	1.80	0.082	0.000	0.082	0.063	0.019	2.590
COVINGTON	UPPER SHAUNAVON (COV. UNIT NO. 1)	1.071	14.00	7.10	21.10	0.150	0.076	0.226	0.220	0.006	2.984
	UPPER SHAUNAVON (NON-UNIT)	0.071	1.41	0.00	1.41	0.001	0.000	0.001	0.001	0.000	0.313
COVINGTON WEST	UPPER SHAUNAVON	0.839	11.80	0.00	11.80	0.099	0.000	0.099	0.083	0.016	3.384
DELTA	UPPER SHAUNAVON (DELTA UNIT NO. 1)	9.383	12.00	13.90	25.90	1.126	1.304	2.430	2.257	0.173	29.632
	UPPER SHAUNAVON (DELTA UNIT NO. 2)	2.540	7.00	10.50	17.50	0.178	0.267	0.445	0.346	0.099	9.409
	UPPER SHAUNAVON (VOL UNIT NO. 3)	0.989	9.80	4.00	13.80	0.096	0.040	0.135	0.087	0.048	4.107
	UPPER SHAUNAVON (NON-UNIT)	0.940	0.84	0.00	0.84	0.008	0.000	0.008	0.006	0.000	0.130
DOLLARD	LOWER SHAUNAVON (NON-UNIT)	0.285	1.10	0.00	1.10	0.003	0.000	0.003	0.001	0.002	0.561
DOLLARD	UPPER SHAUNAVON (UNIT)	26.064	20.00	30.90	50.90	5.213	8.054	13.267	12.876	0.391	99.262
	UPPER SHAUNAVON (E. DOLL. VOL UNIT)	1.648	20.00	23.60	43.60	0.330	0.389	0.719	0.618	0.101	15.826
	UPPER SHAUNAVON (NON-UNIT)	0.774	17.20	0.00	17.20	0.133	0.000	0.133	0.119	0.014	3.250
EASTBROOK	UPPER SHAUNAVON	2.628	2.80	0.00	2.80	0.074	0.000	0.074	0.059	0.015	5.252
EASTEND	SHAUNAVON	5.950	1.39	0.00	1.39	0.083	0.000	0.083	0.076	0.007	2.807
FOSTERTON	ROSERAY SAND (MAIN UNIT)	21.994	17.00	24.80	41.80	3.739	5.455	9.194	8.749	0.445	72.515
	ROSERAY SAND (N.W. UNIT)	1.978	11.00	18.20	29.20	0.218	0.360	0.578	0.560	0.018	6.339
	ROSERAY SAND (W. FOST. VOL UNIT)	1.220	11.00	29.80	40.80	0.134	0.361	0.495	0.464	0.031	7.935
FOSTERTON SOUTH	CANTUAR SAND	0.835	9.10	0.00	9.10	0.076	0.000	0.076	0.044	0.032	4.491
FOSTERTON SOUTH	ROSERAY SAND	1.012	10.10	0.00	10.10	0.102	0.000	0.102	0.034	0.068	7.122
GULL LAKE	BASAL CANTUAR SAND (VOL UNIT NO. 1)	2.729	3.30	17.70	21.00	0.090	0.483	0.573	0.335	0.238	29.665
	BASAL CANTUAR SAND (JOHNSTON UNIT)	1.030	6.50	9.22	15.72	0.067	0.095	0.162	0.139	0.023	2.702
	BASAL CANTUAR SAND (NON-UNIT)	1.157	3.00	0.00	3.00	0.035	0.000	0.035	0.030	0.005	0.000
GULL LAKE CENTRAL	UPPER SHAUNAVON (VOL UNIT NO. 1)	0.614	24.00	17.10	41.10	0.147	0.105	0.252	0.210	0.042	2.308
	UPPER SHAUNAVON (NON-UNIT)	2.648	6.00	0.00	6.00	0.159	0.000	0.159	0.142	0.017	7.171
GULL LAKE NORTH	UPPER SHAUNAVON (UNIT)	6.822	10.00	37.60	47.60	0.682	2.565	3.247	3.068	0.181	33.624
	UPPER SHAUNAVON (NON-UNIT)	0.166	22.60	0.00	22.60	0.038	0.000	0.038	0.035	0.003	0.833
GULL LAKE SOUTH	UPPER SHAUNAVON (VOL UNIT NO. 1)	1.456	12.40	9.80	22.20	0.181	0.143	0.324	0.134	0.190	4.671
	UPPER SHAUNAVON (NON-UNIT)	0.019	5.30	0.00	5.30	0.001	0.000	0.001	0.001	0.000	0.000
HAZLET	ROSERAY SAND (UNIT)	1.742	26.10	11.70	37.80	0.455	0.204	0.659	0.425	0.234	18.171
	ROSERAY SAND (NON-UNIT)	0.253	0.40	0.00	0.40	0.001	0.000	0.001	0.001	0.000	0.068
ILLERBRUN	UPPER SHAUNAVON (VOLUNTARY UNIT)	3.221	16.60	16.40	33.00	0.535	0.528	1.063	0.966	0.097	12.309
	UPPER SHAUNAVON (NON-UNIT)	0.934	4.82	0.00	4.82	0.045	0.000	0.045	0.023	0.022	5.207
INSTOW	UPPER SHAUNAVON (SOUTH VOL UNIT)	1.399	17.00	9.10	26.10	0.238	0.127	0.365	0.134	0.231	18.237
	UPPER SHAUNAVON (UNIT)	22.063	9.00	32.62	41.62	1.986	7.197	9.183	7.732	1.451	139.716
	UPPER SHAUNAVON (NON-UNIT)	0.027	7.40	0.00	7.40	0.002	0.000	0.002	0.002	0.000	0.211
JAVA	CANTUAR SAND	0.975	1.80	4.40	6.20	0.018	0.043	0.061	0.045	0.016	3.818
JOHNSTON	UPPER SHAUNAVON (JOHNSTON UNIT)	0.201	17.90	0.00	17.90	0.036	0.000	0.036	0.035	0.001	0.000
LEITCHVILLE	SHAUNAVON (VOLUNTARY UNIT)	4.936	2.50	2.80	5.30	0.123	0.138	0.261	0.221	0.040	4.145
	SHAUNAVON (NON-UNIT)	3.452	5.40	0.00	5.40	0.186	0.000	0.186	0.130	0.056	18.950
LEON LAKE	SHAUNAVON	5.763	5.87	0.00	5.87	0.338	0.000	0.338	0.292	0.046	10.321
MAIN SUCCESS	ROSERAY SAND (MAIN UNIT)	6.858	13.00	28.60	41.60	0.892	1.961	2.853	2.612	0.241	18.552
NORTH PREMIER	ROSERAY SAND (UNIT NO. 1)	4.017	15.00	28.60	43.60	0.603	1.149	1.752	1.681	0.071	14.111
	ROSERAY SAND (UNIT NO. 4)	4.631	15.00	34.30	49.30	0.695	1.588	2.283	2.177	0.106	30.503
	ROSERAY SAND (NON-UNIT)	0.527	11.80	0.00	11.80	0.061	0.000	0.061	0.039	0.022	4.569

OIL RESERVOIR DATA

DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY —PER CENT—	AVERAGE CONNATE WATER —PER CENT—	FORMATION VOLUME FACTOR	OIL DENSITY KG/M^3	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
763	5.18	23.3	43.6	1.079	920	965	CRETACEOUS	1953	CANTUAR EAST	CANTUAR SAND (UNIT NO. 1)
146	4.57	23.3	43.6	1.079	929	965	CRETACEOUS	1956		CANTUAR SAND (UNIT NO. 2)
716	2.80	26.0	40.0	1.079	933	963	JURASSIC	1952	CANTUAR EAST	ROSERAY SAND (UNIT NO. 1)
502	2.74	26.0	40.0	1.079	938	963	JURASSIC	1952		ROSERAY SAND (UNIT NO. 2)
8	1.22	26.0	40.0	1.079	–	963	JURASSIC	1952		ROSERAY SAND (NON-UNIT)
2765	2.65	27.2	24.6	1.079	964	981	JURASSIC	1952	CANTUAR	LOWER ROSERAY SAND (CANTUAR UNIT)
3186	5.08	26.4	43.6	1.079	922	975	CRETACEOUS	1952	CANTUAR MAIN	CANTUAR SAND (CANTUAR UNIT)
16	5.05	26.4	43.6	1.079	918	975	CRETACEOUS	1952		CANTUAR SAND (NON-UNIT)
269	2.84	21.9	40.0	1.079	941	970	CRETACEOUS	1968	CANTUAR NORTH	ROSERAY SAND
563	2.50	17.1	25.0	1.075	926	1505	JURASSIC	1980	CHAMBERY	UPPER SHAUNAVON
518	8.56	14.6	25.0	1.064	915	1362	JURASSIC	1953	CLINTONVILLE	SHAUNAVON
376	2.44	15.5	22.0	1.036	894	1330	JURASSIC	1969	COVINGTON	UPPER SHAUNAVON (COV. UNIT NO. 1)
32	1.40	21.0	22.0	1.036	894	1330	JURASSIC	1969		UPPER SHAUNAVON (NON-UNIT)
259	4.88	11.8	25.0	1.333	906	1336	JURASSIC	1969	COVINGTON WEST	UPPER SHAUNAVON
2159	3.20	20.4	26.5	1.074	914	1085	JURASSIC	1956	DELTA	UPPER SHAUNAVON (DELTA UNIT NO. 1)
718	3.81	20.0	50.0	1.074	–	1085	JURASSIC	1956		UPPER SHAUNAVON (DELTA UNIT NO. 2)
129	5.86	23.9	41.2	1.074	914	1085	JURASSIC	1956		UPPER SHAUNAVON (VOL UNIT NO. 3)
182	7.12	17.5	50.0	1.074	–	1085	JURASSIC	1956		UPPER SHAUNAVON (NON-UNIT)
32	6.40	17.2	12.0	1.087	927	1382	JURASSIC	1987	DOLLARD	LOWER SHAUNAVON (NON-UNIT)
3642	4.42	20.0	12.0	1.087	914	1402	JURASSIC	1953	DOLLARD	UPPER SHAUNAVON (UNIT)
468	3.20	17.2	30.6	1.087	–	1402	JURASSIC	1953		UPPER SHAUNAVON (E. DOLL. VOL UNIT)
227	3.19	13.2	12.0	1.087	–	1402	JURASSIC	1953		UPPER SHAUNAVON (NON-UNIT)
421	6.17	14.5	25.0	1.075	926	1420	JURASSIC	1968	EASTBROOK	UPPER SHAUNAVON
971	6.90	12.2	20.0	1.099	927	1457	JURASSIC	1952	EASTEND	SHAUNAVON
1012	9.81	28.8	19.0	1.053	907	975	CRET.-JURASSIC	1952	FOSTERTON	ROSERAY SAND (MAIN UNIT)
104	8.44	28.8	19.0	1.036	933	975	CRET.-JURASSIC	1952		ROSERAY SAND (N.W. UNIT)
148	5.03	25.0	30.0	1.053	–	975	CRET.-JURASSIC	1952		ROSERAY SAND (W. FOST. VOL UNIT)
81	7.64	22.4	35.0	1.079	947	950	CRETACEOUS	1968	FOSTERTON SOUTH	CANTUAR SAND
81	8.70	21.8	30.0	1.053	933	968	JURASSIC	1986	FOSTERTON SOUTH	ROSERAY SAND
449	3.59	26.0	30.0	1.075	914	1100	CRETACEOUS	1953	GULL LAKE	BASAL CANTUAR SAND (VOL UNIT NO. 1)
132	8.58	21.1	39.5	1.076	–	1100	CRETACEOUS	1953		BASAL CANTUAR SAND (JOHNSTON UNIT)
129	6.73	23.7	39.5	1.076	927	1100	CRETACEOUS	1953		BASAL CANTUAR SAND (NON-UNIT)
453	1.82	16.9	46.5	1.080	914	1195	JURASSIC	1953	GULL LAKE CENTRAL	UPPER SHAUNAVON (VOL UNIT NO. 1)
907	3.66	16.1	46.5	1.080	907	1196	JURASSIC	1953		UPPER SHAUNAVON (NON-UNIT)
1230	3.93	19.4	25.0	1.031	964	1156	JURASSIC	1953	GULL LAKE NORTH	UPPER SHAUNAVON (UNIT)
95	1.88	18.9	25.0	1.031	920	1156	JURASSIC	1953		UPPER SHAUNAVON (NON-UNIT)
779	1.14	24.7	30.0	1.053	881	1325	JURASSIC	1952	GULL LAKE SOUTH	UPPER SHAUNAVON (VOL UNIT NO. 1)
32	0.90	17.5	30.0	1.053	891	1325	JURASSIC	1952		UPPER SHAUNAVON (NON-UNIT)
191	5.27	23.0	21.0	1.050	920	963	JURASSIC	1983	HAZLET	ROSERAY SAND (UNIT)
32	4.57	23.0	21.0	1.050	–	963	JURASSIC	1983		ROSERAY SAND (NON-UNIT)
453	6.06	15.9	22.0	1.057	885	1290	JURASSIC	1985	ILLERBRUN	UPPER SHAUNAVON (VOLUNTARY UNIT)
227	3.82	15.4	22.0	1.057	–	1290	JURASSIC	1985		UPPER SHAUNAVON (NON-UNIT)
441	3.56	16.6	42.9	1.064	914	1372	JURASSIC	1954	INSTOW	UPPER SHAUNAVON (SOUTH VOL UNIT)
4244	4.88	13.8	15.0	1.056	914	1372	JURASSIC	1954		UPPER SHAUNAVON (UNIT)
16	2.44	8.6	15.0	1.056	922	1372	JURASSIC	1954		UPPER SHAUNAVON (NON-UNIT)
347	2.09	24.0	40.0	1.071	947	1013	CRETACEOUS	1958	JAVA	CANTUAR SAND
81	2.44	16.4	15.0	1.031	914	1188	JURASSIC	1953	JOHNSTON	UPPER SHAUNAVON (JOHNSTON UNIT)
971	4.83	15.7	25.6	1.064	914	1371	JURASSIC	1980	LEITCHVILLE	SHAUNAVON (VOLUNTARY UNIT)
1586	2.47	15.0	37.5	1.064	923	1371	JURASSIC	1980		SHAUNAVON (NON-UNIT)
1674	3.74	16.2	40.0	1.068	922	1371	JURASSIC	1953	LEON LAKE	SHAUNAVON
770	4.51	26.8	19.9	1.087	914	975	JURASSIC	1952	MAIN SUCCESS	ROSERAY SAND (MAIN UNIT)
364	4.66	32.9	25.0	1.042	998	1006	JURASSIC	1953	NORTH PREMIER	ROSERAY SAND (UNIT NO. 1)
636	4.45	26.7	35.8	1.048	–	1006	JURASSIC	1953		ROSERAY SAND (UNIT NO. 4)
81	3.80	25.1	25.0	1.042	917	1006	JURASSIC	1953		ROSERAY SAND (NON-UNIT)

OIL RESERVES

POOL	PRODUCING HORIZON	INITIAL OIL IN PLACE MILLION CUBIC METRES	ESTIMATED RECOVERY PRIMARY	ENHANCED	TOTAL	INITIAL RESERVES PRIMARY	ENHANCED	TOTAL	CUMULATIVE PROD. DEC 31/88	REMAINING RESERVES	1988 PROD $1000\ m^3$
			PER CENT			MILLION CUBIC METRES					
NORTH PREMIER	UPPER SHAUNAVON (UNIT NO. 1)	0.243	9.88	0.00	9.88	0.024	0.000	0.024	0.021	0.003	0.854
	UPPER SHAUNAVON (VOLUNTARY UNIT)	0.942	6.05	7.96	14.01	0.057	0.075	0.132	0.120	0.012	3.350
	UPPER SHAUNAVON (UNIT NO. 4)	4.330	6.50	6.40	12.90	0.281	0.277	0.558	0.305	0.253	9.897
	UPPER SHAUNAVON (NON-UNIT)	0.652	11.50	0.00	11.50	0.075	0.000	0.075	0.057	0.018	3.539
NOTUKEU	UPPER SHAUNAVON	2.541	0.91	0.00	0.91	0.023	0.000	0.023	0.020	0.003	2.552
PENNANT	UPPER SHAUNAVON	0.555	20.90	11.00	31.90	0.116	0.061	0.177	0.086	0.091	4.002
RAPDAN	UPPER SHAUNAVON (UNIT)	16.574	6.10	21.21	27.31	1.011	3.515	4.526	2.782	1.744	112.068
	UPPER SHAUNAVON (N.RAPDAN VOL UNIT)	3.974	3.00	1.84	4.84	0.119	0.073	0.192	0.175	0.017	4.395
	UPPER SHAUNAVON (VOL UNIT NO. 2)	1.111	6.60	12.15	18.75	0.073	0.135	0.208	0.144	0.064	9.324
	UPPER SHAUNAVON (NON-UNIT)	1.260	0.95	0.00	0.95	0.012	0.000	0.012	0.010	0.002	1.006
RAPDAN WEST	SHAUNAVON	5.078	4.20	0.00	4.20	0.213	0.000	0.213	0.170	0.043	10.068
SOUTH SUCCESS	ROSERAY SAND (SOUTHWEST UNIT)	2.309	16.50	0.00	16.50	0.381	0.000	0.381	0.160	0.221	23.374
	ROSERAY SAND (SUCCESS UNIT)	8.563	13.20	34.60	47.80	1.130	2.963	4.093	3.523	0.570	58.630
SUCCESS ALPHA	ROSERAY SAND (ALPHA UNIT)	1.440	14.30	29.40	43.70	0.206	0.423	0.629	0.583	0.046	6.570
SUCCESS NORTH	ROSERAY SAND (VOLUNTARY UNIT)	1.036	28.40	31.40	59.80	0.295	0.326	0.621	0.218	0.403	36.453
SUFFIELD	ROSERAY SAND (UNIT NO. 1)	1.878	15.00	51.70	66.70	0.282	0.971	1.253	1.149	0.104	26.898
	ROSERAY SAND (UNIT NO. 3)	2.780	13.00	36.00	49.00	0.361	1.001	1.362	1.225	0.137	33.007
SUFFIELD	UPPER SHAUNAVON (UNIT NO. 2)	3.222	7.00	18.16	25.16	0.226	0.585	0.811	0.663	0.148	19.649
	UPPER SHAUNAVON (UNIT NO. 3)	0.805	9.90	24.20	34.10	0.080	0.195	0.275	0.208	0.067	3.883
	UPPER SHAUNAVON (NON-UNIT)	0.803	5.50	0.00	5.50	0.044	0.000	0.044	0.044	0.000	0.402
VERLO	ROSERAY SAND (VERLO ROSERAY SD UNIT)	8.349	3.50	24.30	27.80	0.292	2.029	2.321	1.754	0.567	89.301
WHITEMUD	SHAUNAVON	5.378	1.26	0.00	1.26	0.068	0.000	0.068	0.055	0.013	2.552
MISCELLANEOUS	BASAL MANNVILLE SAND	0.334	3.00	0.00	3.00	0.010	0.000	0.010	0.009	0.001	0.000
	CANTUAR SAND	6.588	3.54	0.00	3.54	0.233	0.000	0.233	0.201	0.032	7.471
	GRAVELBOURG	0.124	15.30	0.00	15.30	0.019	0.000	0.019	0.015	0.004	0.703
	PREMIER SAND (N. PREMIER UNIT NO. 2)	0.232	15.10	15.10	30.20	0.035	0.035	0.070	0.063	0.007	1.059
	ROSERAY SAND	9.435	4.02	0.00	4.02	0.379	0.000	0.379	0.299	0.080	13.188
	LOWER SHAUNAVON	2.779	2.34	0.00	2.34	0.065	0.000	0.065	0.057	0.008	2.026
	UPPER SHAUNAVON	13.756	2.92	0.00	2.92	0.402	0.000	0.402	0.317	0.085	26.574
	TOTAL AREA III MEDIUM	**427.715**				**38.933**	**66.580**	**105.913**	**83.526**	**22.387**	**1977.972**
AREA IV - MEDIUM											
BENSON	MIDALE (NORTHWEST VOL UNIT)	0.513	6.00	3.50	9.50	0.031	0.018	0.049	0.034	0.015	1.634
	MIDALE (UNIT)	8.079	6.00	22.50	28.50	0.485	1.818	2.303	1.616	0.687	48.981
	MIDALE (VOLUNTARY UNIT NO. 1)	2.477	6.00	17.00	23.00	0.149	0.421	0.570	0.398	0.172	16.650
	MIDALE (NON-UNIT)	9.263	6.00	0.00	6.00	0.557	0.000	0.557	0.278	0.279	27.578
BENSON EAST	MIDALE	0.825	2.00	10.50	12.50	0.017	0.087	0.104	0.016	0.088	3.412
BROMHEAD	MIDALE	2.472	13.00	0.00	13.00	0.321	0.000	0.321	0.268	0.053	6.406
BRYANT	FROBISHER	0.341	13.00	0.00	13.00	0.044	0.000	0.044	0.021	0.023	2.904
BRYANT	MIDALE	2.408	3.70	0.00	3.70	0.089	0.000	0.089	0.060	0.029	7.110
COLGATE	MIDALE	2.615	23.00	0.00	23.00	0.601	0.000	0.601	0.279	0.322	56.383
ELSWICK	MIDALE	5.402	9.50	21.20	30.70	0.513	1.145	1.658	0.170	1.488	32.517
FLAT LAKE	RATCLIFFE (NON-UNIT)	0.192	7.50	0.00	7.50	0.014	0.000	0.014	0.007	0.007	0.771
FREESTONE	FROBISHER-ALIDA	2.926	20.00	0.00	20.00	0.585	0.000	0.585	0.407	0.178	27.053
GRIFFIN	FROBISHER	0.455	29.00	0.00	29.00	0.132	0.000	0.132	0.130	0.002	1.193
HANDSWORTH	ALIDA	3.611	14.50	0.00	14.50	0.524	0.000	0.524	0.421	0.103	14.560
HARTAVEN	FROBISHER-ALIDA	0.875	29.50	0.00	29.50	0.258	0.000	0.258	0.109	0.149	12.851
HOFFER	RATCLIFFE	1.268	20.50	0.00	20.50	0.260	0.000	0.260	0.254	0.006	1.260
HUME	FROBISHER	1.109	22.00	0.00	22.00	0.244	0.000	0.244	0.202	0.042	6.338
HUME	MIDALE	1.218	17.00	0.00	17.00	0.207	0.000	0.207	0.156	0.051	6.490
HUMMINGBIRD	RATCLIFFE (VOLUNTARY UNIT NO. 1)	4.118	10.00	10.90	20.90	0.412	0.449	0.861	0.591	0.270	25.636
HUNTOON	FROBISHER	7.156	8.30	0.00	8.30	0.594	0.000	0.594	0.532	0.062	10.475

OIL RESERVOIR DATA

DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY —PER CENT—	AVERAGE CONNATE WATER —PER CENT—	FORMATION VOLUME FACTOR	OIL DENSITY KG/M^3	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
49	4.57	16.1	25.0	1.111	914	1067	JURASSIC	1953	NORTH PREMIER	UPPER SHAUNAVON (UNIT NO. 1)
291	3.36	16.9	40.0	1.053	–	1067	JURASSIC	1953		UPPER SHAUNAVON (VOLUNTARY UNIT)
1554	2.80	19.0	45.0	1.050	–	1067	JURASSIC	1953		UPPER SHAUNAVON (UNIT NO. 4)
178	3.79	18.5	45.0	1.053	–	1067	JURASSIC	1953		UPPER SHAUNAVON (NON-UNIT)
583	4.58	13.5	25.0	1.064	917	1366	JURASSIC	1969	NOTUKEU	UPPER SHAUNAVON
375	2.10	16.5	56.0	1.053	928	980	JURASSIC	1965	PENNANT	UPPER SHAUNAVON
3400	5.00	15.0	30.0	1.077	914	1402	JURASSIC	1953	RAPDAN	UPPER SHAUNAVON (UNIT)
497	5.08	17.7	5.0	1.084	–	1402	JURASSIC	1953		UPPER SHAUNAVON (N.RAPDAN VOL UNIT)
259	4.14	15.8	28.3	1.080	–	1402	JURASSIC	1953		UPPER SHAUNAVON (VOL UNIT NO. 2)
291	2.94	16.5	5.0	1.084	919	1402	JURASSIC	1953		UPPER SHAUNAVON (NON-UNIT)
1619	2.64	13.3	5.0	1.084	921	1407	JURASSIC	1955	RAPDAN WEST	SHAUNAVON
261	5.86	24.0	30.0	1.075	934	975	JURASSIC	1953	SOUTH SUCCESS	ROSERAY SAND (SOUTHWEST UNIT)
732	6.07	27.4	23.4	1.089	914	975	JURASSIC	1953		ROSERAY SAND (SUCCESS UNIT)
176	4.60	24.8	22.9	1.075	920	975	JURASSIC	1953	SUCCESS ALPHA	ROSERAY SAND (ALPHA UNIT)
297	2.39	25.0	37.0	1.077	929	966	JURASSIC	1966	SUCCESS NORTH	ROSERAY SAND (VOLUNTARY UNIT)
341	3.23	26.0	29.3	1.078	919	1036	JURASSIC	1954	SUFFIELD	ROSERAY SAND (UNIT NO. 1)
583	2.99	26.0	36.0	1.078	–	1036	JURASSIC	1954		ROSERAY SAND (UNIT NO. 3)
699	3.60	17.6	25.0	1.031	914	1097	JURASSIC	1954	SUFFIELD	UPPER SHAUNAVON (UNIT NO. 2)
262	2.28	22.8	36.2	1.080	–	1097	JURASSIC	1954		UPPER SHAUNAVON (UNIT NO. 3)
194	2.67	21.3	25.0	1.031	937	1097	JURASSIC	1954		UPPER SHAUNAVON (NON-UNIT)
896	5.15	27.5	29.1	1.080	920	963	JURASSIC	1956	VERLO	ROSERAY SAND (VERLO ROSERAY SD UNIT)
1003	4.08	17.8	20.0	1.083	924	1432	JURASSIC	1953	WHITEMUD	SHAUNAVON
65	4.57	20.0	25.0	1.333	–	–	CRETACEOUS	–	MISCELLANEOUS	BASAL MANNVILLE SAND
1327	3.57	23.0	35.0	1.075	–	–	CRETACEOUS	–		CANTUAR SAND
65	2.29	14.8	25.0	1.333	–	–	JURASSIC	–		GRAVELBOURG
75	1.40	30.8	25.0	1.048	–	–	CRETACEOUS	–		PREMIER SAND (N. PREMIER UNIT NO. 2)
1133	4.65	24.5	25.0	1.026	–	–	JURASSIC	–		ROSERAY SAND
518	5.09	14.8	25.0	1.053	–	–	JURASSIC	–		LOWER SHAUNAVON
3626	3.18	17.1	25.0	1.075	–	–	JURASSIC	–		UPPER SHAUNAVON
									AREA IV - MEDIUM	
243	2.26	15.0	30.0	1.124	875	1371	MISSISSIPPIAN	1956	BENSON	MIDALE (NORTHWEST VOL UNIT)
2978	1.80	24.2	30.0	1.124	875	1371	MISSISSIPPIAN	1956		MIDALE (UNIT)
1117	2.77	15.0	40.0	1.124	875	1371	MISSISSIPPIAN	1956		MIDALE (VOLUNTARY UNIT NO. 1)
1909	6.10	12.8	30.0	1.124	886	1371	MISSISSIPPIAN	1956		MIDALE (NON-UNIT)
257	1.70	27.2	22.0	1.124	875	1375	MISSISSIPPIAN	1963	BENSON EAST	MIDALE
615	5.00	13.9	35.0	1.124	903	1693	MISSISSIPPIAN	1965	BROMHEAD	MIDALE
194	4.30	9.1	50.0	1.112	896	1433	MISSISSIPPIAN	1979	BRYANT	FROBISHER
1036	1.80	26.9	46.0	1.125	904	1408	MISSISSIPPIAN	1979	BRYANT	MIDALE
178	12.20	18.7	30.0	1.087	851	1516	MISSISSIPPIAN	1963	COLGATE	MIDALE
1391	5.30	19.7	54.4	1.226	870	1515	MISSISSIPPIAN	1984	ELSWICK	MIDALE
65	8.60	8.1	49.2	1.199	867	1956	MISSISSIPPIAN	1966	FLAT LAKE	RATCLIFFE (NON-UNIT)
744	6.40	12.6	35.0	1.333	879	1180	MISSISSIPPIAN	1953	FREESTONE	FROBISHER-ALIDA
324	2.99	8.4	35.0	1.163	885	1302	MISSISSIPPIAN	1956	GRIFFIN	FROBISHER
1181	8.60	9.5	35.0	1.333	886	1204	MISSISSIPPIAN	1964	HANDSWORTH	ALIDA
210	5.70	13.7	40.0	1.124	876	1199	MISSISSIPPIAN	1966	HARTAVEN	FROBISHER-ALIDA
275	6.20	14.3	35.0	1.250	869	1935	MISSISSIPPIAN	1964	HOFFER	RATCLIFFE
356	6.65	8.1	35.0	1.124	883	1350	MISSISSIPPIAN	1967	HUME	FROBISHER
718	2.90	10.1	35.0	1.124	869	1332	MISSISSIPPIAN	1966	HUME	MIDALE
442	10.71	14.0	30.8	1.117	870	1660	MISSISSIPPIAN	1966	HUMMINGBIRD	RATCLIFFE (VOLUNTARY UNIT NO. 1)
1376	9.00	10.0	35.0	1.124	892	1372	MISSISSIPPIAN	1957	HUNTOON	FROBISHER

OIL RESERVES

POOL	PRODUCING HORIZON	INITIAL OIL IN PLACE MILLION CUBIC METRES	ESTIMATED RECOVERY PRIMARY	ENHANCED	TOTAL	INITIAL RESERVES PRIMARY	ENHANCED	TOTAL	CUMULATIVE PROD. DEC 31/88	REMAINING RESERVES	1988 PROD $1000\ m^3$
			PER CENT			MILLION CUBIC METRES					
HUNTOON	MIDALE (VOL. UNIT NO. 1)	4.443	5.00	3.30	8.30	0.222	0.147	0.369	0.309	0.060	6.184
	MIDALE (VOL. UNIT NO. 2)	0.522	2.00	1.00	3.00	0.010	0.005	0.015	0.009	0.006	1.201
	MIDALE (NON-UNIT)	2.815	3.70	0.00	3.70	0.104	0.000	0.104	0.086	0.018	9.026
INGOLDSBY	FROBISHER-ALIDA (NON-UNIT)	7.933	22.70	0.00	22.70	1.801	0.000	1.801	1.588	0.213	32.043
INNES	FROBISHER	10.417	20.30	0.00	20.30	2.115	0.000	2.115	1.889	0.226	38.864
LAKE ALMA	RATCLIFFE (VOLUNTARY UNIT)	2.379	17.00	28.00	45.00	0.404	0.666	1.070	0.705	0.365	23.736
LOST HORSE HILL	FROBISHER-ALIDA (VOL UNIT NO. 1)	9.649	24.00	0.00	23.30	2.316	0.000	2.316	2.015	0.301	39.572
	FROBISHER-ALIDA (NON-UNIT)	6.440	21.50	0.00	21.50	1.385	0.000	1.385	0.906	0.479	36.598
LOUGHEED	MIDALE	18.540	9.80	0.00	9.80	1.817	0.000	1.817	0.767	1.050	74.782
MACOUN	MIDALE	1.882	21.00	0.00	21.00	0.395	0.000	0.395	0.300	0.095	10.733
MACOUN WEST	MIDALE	0.783	12.00	0.00	12.00	0.095	0.000	0.095	0.055	0.040	3.927
MELROSE	FROBISHER-ALIDA	1.051	24.00	0.00	24.00	0.252	0.000	0.252	0.134	0.118	9.064
MIDALE	CENTRAL FROBISHER	6.068	16.10	0.00	16.10	0.977	0.000	0.977	0.920	0.057	9.781
MIDALE	CENTRAL MIDALE (S. VOL. UNIT NO. 1)	1.391	4.40	2.90	7.30	0.061	0.040	0.101	0.055	0.046	4.031
	CENTRAL MIDALE (UNIT)	56.802	16.90	16.70	33.60	9.600	9.486	19.086	15.791	3.295	284.573
	CENTRAL MIDALE (NON-UNIT)	17.347	9.50	0.00	9.50	1.648	0.000	1.648	1.264	0.384	53.979
MINARD	MIDALE	0.679	2.80	0.00	2.80	0.023	0.000	0.023	0.013	0.010	2.018
MOOSE VALLEY	TILSTON	1.814	10.00	0.00	10.00	0.181	0.000	0.181	0.089	0.092	13.343
NEPTUNE	RATCLIFFE	3.857	12.20	0.00	12.20	0.471	0.000	0.471	0.307	0.164	15.484
NORTH HANDSWORTH	ALIDA	2.695	17.00	0.00	17.00	0.458	0.000	0.458	0.344	0.114	12.354
OUNGRE	RATCLIFFE (NON-UNIT)	1.186	11.00	0.00	11.00	0.128	0.000	0.128	0.062	0.066	8.607
RALPH	MIDALE (VOLUNTARY UNIT)	1.041	14.20	2.70	16.90	0.148	0.028	0.176	0.138	0.038	4.979
	MIDALE (NON-UNIT)	0.181	6.00	0.00	5.50	0.010	0.000	0.010	0.006	0.004	1.757
RED JACKET	GRAVELBOURG	0.221	5.00	0.00	5.00	0.011	0.000	0.011	0.006	0.005	0.879
RED JACKET	SHAUNAVON-GRAVELBOURG	2.595	19.50	0.00	19.50	0.506	0.000	0.506	0.121	0.385	30.008
SKINNER LAKE	RATCLIFFE	0.941	5.50	0.00	5.50	0.052	0.000	0.052	0.019	0.033	4.338
STOUGHTON	FROBISHER-ALIDA	0.913	39.50	0.00	39.50	0.361	0.000	0.361	0.332	0.029	4.278
STOUGHTON SOUTH	FROBISHER	1.479	9.50	0.00	9.50	0.141	0.000	0.141	0.119	0.022	4.127
TATAGWA	MIDALE	19.099	4.20	0.00	4.20	0.802	0.000	0.802	0.378	0.424	59.086
TATAGWA NORTH	MIDALE	3.632	2.10	0.00	2.10	0.076	0.000	0.076	0.051	0.025	8.815
VIEWFIELD	FROBISHER (NON-UNIT)	6.055	22.00	0.00	22.00	1.332	0.000	1.332	0.692	0.640	49.532
VIEW HILL	MIDALE	0.449	40.00	0.00	40.00	0.180	0.000	0.180	0.155	0.025	2.435
WAPELLA	WAPELLA SAND	14.481	17.30	0.00	17.30	2.505	0.000	2.505	1.503	1.002	98.500
WEIR HILL	FROBISHER	0.694	8.00	0.00	8.00	0.056	0.000	0.056	0.053	0.003	0.828
WEST INNES	FROBISHER	0.730	25.00	0.00	25.00	0.183	0.000	0.183	0.164	0.019	1.528
WEST KINGSFORD	MIDALE (CULLEN UNIT)	0.882	54.00	0.00	54.00	0.476	0.000	0.476	0.428	0.048	4.005
	MIDALE (NON-UNIT)	2.450	25.20	0.00	25.20	0.617	0.000	0.617	0.541	0.076	7.205
WEYBURN	FROBISHER	9.729	7.60	0.00	7.60	0.739	0.000	0.739	0.527	0.212	27.596
WEYBURN	MIDALE (UNIT)	176.185	13.50	15.90	29.40	23.785	28.013	51.798	43.452	8.346	818.987
	MIDALE (VOLUNTARY UNIT NO. 2)	0.293	8.50	7.50	14.00	0.019	0.022	0.041	0.016	0.025	1.256
	MIDALE (VOLUNTARY UNIT NO. 3)	0.320	8.60	5.00	13.60	0.028	0.016	0.044	0.017	0.027	1.150
	MIDALE (VOLUNTARY UNIT NO. 4)	2.484	3.20	4.60	7.80	0.080	0.115	0.195	0.046	0.149	5.370
	MIDALE (VOLUNTARY UNIT NO. 5)	1.912	6.40	5.00	11.40	0.122	0.096	0.218	0.086	0.132	7.280
	MIDALE (VOLUNTARY UNIT NO. 6)	1.435	6.70	3.20	9.90	0.096	0.046	0.142	0.049	0.093	6.099
	MIDALE (VOLUNTARY UNIT NO. 7)	2.260	9.60	7.50	17.10	0.219	0.171	0.390	0.128	0.262	7.850
	MIDALE (NON-UNIT)	32.734	8.30	0.10	8.40	2.082	0.033	2.095	1.452	0.643	114.818
MISCELLANEOUS	ALIDA	0.804	18.50	0.00	18.50	0.133	0.000	0.133	0.056	0.077	8.292
	BAKKEN	0.121	2.50	0.00	2.50	0.003	0.000	0.003	0.003	0.000	0.164
	BIRDBEAR	0.404	10.40	0.00	10.40	0.042	0.000	0.042	0.022	0.020	3.153
	FROBISHER	5.476	11.30	0.00	11.30	0.619	0.000	0.619	0.317	0.302	47.917
	FROBISHER-ALIDA	1.584	5.40	0.00	5.40	0.086	0.000	0.086	0.020	0.066	9.436
	GRAVELBOURG	0.569	12.80	0.00	12.80	0.074	0.000	0.074	0.040	0.034	4.199
	JURASSIC	4.668	5.20	0.00	5.20	0.244	0.000	0.244	0.144	0.100	15.024
	MANNVILLE	0.430	1.60	0.00	1.60	0.007	0.000	0.007	0.002	0.005	1.487
	MIDALE	19.139	3.80	0.00	3.80	0.727	0.000	0.727	0.389	0.338	65.781
	RATCLIFFE	3.953	11.10	0.00	11.10	0.439	0.000	0.439	0.250	0.189	18.697

OIL RESERVOIR DATA

DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY —PER CENT—	AVERAGE CONNATE WATER —PER CENT—	FORMATION VOLUME FACTOR	OIL DENSITY KG/M^3	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
1230	3.47	18.0	35.0	1.124	874	1359	MISSISSIPPIAN	1957	HUNTOON	MIDALE (VOL. UNIT NO. 1)
162	5.70	12.7	50.0	1.124	875	1371	MISSISSIPPIAN	1957		MIDALE (VOL. UNIT NO. 2)
1068	5.30	8.6	35.0	1.124	890	1371	MISSISSIPPIAN	1957		MIDALE (NON-UNIT)
1165	10.50	10.7	30.0	1.155	876	1069	MISSISSIPPIAN	1955	INGOLDSBY	FROBISHER-ALIDA (NON-UNIT)
2071	10.00	9.0	35.0	1.163	891	1333	MISSISSIPPIAN	1965	INNES	FROBISHER
437	4.24	23.5	40.0	1.098	874	1981	MISSISSIPPIAN	1965	LAKE ALMA	RATCLIFFE (VOLUNTARY UNIT)
583	20.95	15.7	45.0	1.093	848	1174	MISSISSIPPIAN	1963	LOST HORSE HILL	FROBISHER-ALIDA (VOL UNIT NO. 1)
855	10.30	13.7	40.0	1.124	897	1174	MISSISSIPPIAN	1963		FROBISHER-ALIDA (NON-UNIT)
1780	8.30	21.7	35.0	1.124	873	1407	MISSISSIPPIAN	1959	LOUGHEED	MIDALE
825	3.71	11.0	35.0	1.163	895	1531	MISSISSIPPIAN	1969	MACOUN	MIDALE
259	7.44	8.7	45.0	1.163	888	1559	MISSISSIPPIAN	1970	MACOUN WEST	MIDALE
194	7.56	14.6	45.0	1.124	878	1169	MISSISSIPPIAN	1963	MELROSE	FROBISHER-ALIDA
1780	7.90	9.7	50.0	1.124	881	1411	MISSISSIPPIAN	1953	MIDALE	CENTRAL FROBISHER
259	7.03	14.7	41.6	1.124	883	1340	MISSISSIPPIAN	1953	MIDALE	CENTRAL MIDALE (S. VOL. UNIT NO. 1)
12335	5.24	16.3	39.4	1.124	877	1402	MISSISSIPPIAN	1953		CENTRAL MIDALE (UNIT)
4255	4.00	17.9	36.0	1.124	883	1402	MISSISSIPPIAN	1953		CENTRAL MIDALE (NON-UNIT)
259	2.93	26.0	45.0	1.234	905	1340	MISSISSIPPIAN	1956	MINARD	MIDALE
258	10.76	12.1	40.0	1.111	909	1163	MISSISSIPPIAN	1956	MOOSE VALLEY	TILSTON
1004	4.85	16.0	45.0	1.111	910	1764	MISSISSIPPIAN	1967	NEPTUNE	RATCLIFFE
825	6.70	10.0	35.0	1.333	885	1176	MISSISSIPPIAN	1965	NORTH HANDSWORTH	ALIDA
485	2.80	19.2	45.0	1.230	878	1826	MISSISSIPPIAN	1959	OUNGRE	RATCLIFFE (NON-UNIT)
880	3.90	10.0	55.9	1.124	883	1315	MISSISSIPPIAN	1973	RALPH	MIDALE (VOLUNTARY UNIT)
97	3.85	11.0	55.9	1.124	883	1315	MISSISSIPPIAN	1973		MIDALE (NON-UNIT)
32	3.60	31.0	36.0	1.003	930	735	JURASSIC	1985	RED JACKET	GRAVELBOURG
227	6.60	27.8	37.5	1.003	948	665	JURASSIC	1984	RED JACKET	SHAUNAVON-GRAVELBOURG
259	3.67	20.0	45.0	1.111	893	1723	MISSISSIPPIAN	1969	SKINNER LAKE	RATCLIFFE
388	4.30	9.8	35.0	1.164	882	1268	MISSISSIPPIAN	1960	STOUGHTON	FROBISHER-ALIDA
502	8.20	7.8	45.0	1.163	892	1265	MISSISSIPPIAN	1974	STOUGHTON SOUTH	FROBISHER
1391	11.29	20.3	35.0	1.085	904	1478	MISSISSIPPIAN	1977	TATAGWA	MIDALE
421	8.40	18.5	25.0	1.205	900	1470	MISSISSIPPIAN	1983	TATAGWA NORTH	MIDALE
841	13.24	10.7	35.0	1.279	872	1270	MISSISSIPPIAN	1969	VIEWFIELD	FROBISHER (NON-UNIT)
162	5.61	11.1	50.0	1.124	885	1539	MISSISSIPPIAN	1959	VIEW HILL	MIDALE
1278	5.86	27.9	30.0	1.010	906	701	CRET.-JURASSIC	1952	WAPELLA	WAPELLA SAND
129	10.21	10.8	35.0	1.333	871	1353	MISSISSIPPIAN	1968	WEIR HILL	FROBISHER
259	5.20	9.7	35.0	1.163	893	1335	MISSISSIPPIAN	1965	WEST INNES	FROBISHER
291	5.36	10.4	35.0	1.196	895	1485	MISSISSIPPIAN	1955	WEST KINGSFORD	MIDALE (CULLEN UNIT)
712	5.50	11.8	35.0	1.205	882	1485	MISSISSIPPIAN	1955		MIDALE (NON-UNIT)
1990	7.10	12.9	40.0	1.124	876	1417	MISSISSIPPIAN	1954	WEYBURN	FROBISHER
21529	7.83	17.2	31.7	1.124	880	1399	MISSISSIPPIAN	1954	WEYBURN	MIDALE (UNIT)
129	3.00	12.8	44.0	1.135	880	1405	MISSISSIPPIAN	1954		MIDALE (VOLUNTARY UNIT NO. 2)
65	4.70	18.0	33.0	1.150	880	1405	MISSISSIPPIAN	1954		MIDALE (VOLUNTARY UNIT NO. 3)
1100	4.90	10.4	50.0	1.124	880	1405	MISSISSIPPIAN	1954		MIDALE (VOLUNTARY UNIT NO. 4)
356	6.60	15.6	40.0	1.150	880	1405	MISSISSIPPIAN	1954		MIDALE (VOLUNTARY UNIT NO. 5)
259	6.56	14.8	35.0	1.124	880	1405	MISSISSIPPIAN	1954		MIDALE (VOLUNTARY UNIT NO. 6)
1003	3.60	12.8	44.0	1.135	880	1405	MISSISSIPPIAN	1954		MIDALE (VOLUNTARY UNIT NO. 7)
4903	6.36	17.1	31.0	1.124	877	1405	MISSISSIPPIAN	1954		MIDALE (NON-UNIT)
194	7.08	12.0	35.0	1.333	–	–	MISSISSIPPIAN	–	MISCELLANEOUS	ALIDA
64	2.50	10.7	25.0	1.064	–	–	MISSISSIPPIAN	–		BAKKEN
131	3.50	13.8	25.0	1.176	–	–	DEVONIAN	–		BIRDBEAR
2203	8.14	9.1	50.0	1.124	–	–	MISSISSIPPIAN	–		FROBISHER
454	5.42	13.2	35.0	1.333	–	–	MISSISSIPPIAN	–		FROBISHER-ALIDA
97	4.00	27.0	25.0	1.333	–	–	JURASSIC	–		GRAVELBOURG
356	7.17	26.5	30.0	1.010	–	–	JURASSIC	–		JURASSIC
49	3.75	31.5	25.0	1.010	–	–	CRETACEOUS	–		MANNVILLE
3208	8.33	16.1	50.0	1.124	–	–	MISSISSIPPIAN	–		MIDALE
907	5.88	15.2	35.0	1.333	–	–	MISSISSIPPIAN	–		RATCLIFFE

OIL RESERVES

POOL	PRODUCING HORIZON	INITIAL OIL IN PLACE MILLION CUBIC METRES	ESTIMATED RECOVERY PRIMARY	ESTIMATED RECOVERY ENHANCED	ESTIMATED RECOVERY TOTAL	INITIAL RESERVES PRIMARY	INITIAL RESERVES ENHANCED	INITIAL RESERVES TOTAL	CUMULATIVE PROD. DEC 31/88	REMAINING RESERVES	1988 PROD $1000\ m^3$
			PER CENT			MILLION CUBIC METRES					
MISCELLANEOUS	SOURIS VALLEY	0.255	5.50	0.00	5.50	0.014	0.000	0.014	0.011	0.003	1.190
	WAPELLA	0.057	26.30	0.00	26.30	0.015	0.000	0.015	0.001	0.014	1.426
	YEOMAN	0.426	4.90	0.00	4.90	0.021	0.000	0.021	0.008	0.013	4.197
	TOTAL AREA IV MEDIUM	**537.388**				**67.530**	**42.822**	**110.352**	**85.319**	**25.033**	**2453.783**
AREA IV - LIGHT											
ALAMEDA	MIDALE (CENTRAL UNIT)	1.162	11.70	29.00	40.70	0.136	0.337	0.473	0.395	0.078	6.416
	MIDALE (EAST UNIT)	4.848	18.00	22.00	38.00	0.776	1.067	1.843	1.545	0.298	25.491
	MIDALE (NORTH UNIT)	1.000	12.00	16.50	28.50	0.120	0.165	0.285	0.260	0.025	3.173
	MIDALE (SOUTH UNIT)	1.792	13.30	13.20	26.50	0.238	0.237	0.475	0.424	0.051	6.375
	MIDALE (NON-UNIT)	3.532	7.80	0.00	7.80	0.275	0.000	0.275	0.224	0.051	17.317
ALAMEDA WEST	FROBISHER	0.151	0.20	0.00	0.20	0.000	0.000	0.000	0.000	0.000	0.000
ALAMEDA WEST	MIDALE (VOLUNTARY UNIT NO. 1)	0.771	5.00	6.40	11.40	0.039	0.049	0.088	0.037	0.051	4.122
	MIDALE (NON-UNIT)	0.122	1.50	0.00	1.50	0.002	0.000	0.002	0.002	0.000	0.219
ALIDA EAST	FROBISHER-ALIDA (UNIT)	11.208	26.70	0.00	26.70	2.993	0.000	2.993	1.989	1.004	78.364
	FROBISHER-ALIDA (NON-UNIT)	0.419	8.80	0.00	8.80	0.037	0.000	0.037	0.035	0.002	0.722
ALIDA NORTH	ALIDA	1.050	23.30	0.00	23.30	0.245	0.000	0.245	0.131	0.114	11.100
ALIDA WEST	FROBISHER-ALIDA	8.538	30.80	0.00	30.80	2.630	0.000	2.630	1.917	0.713	77.344
ARCOLA	FROBISHER-ALIDA	7.845	22.90	0.00	22.90	1.797	0.000	1.797	1.097	0.700	68.481
AUBURNTON	FROBISHER-ALIDA	0.199	4.50	0.00	4.50	0.009	0.000	0.009	0.009	0.000	1.371
BENSON	FROBISHER	2.309	5.38	0.00	5.38	0.124	0.000	0.124	0.072	0.052	11.806
BIENFAIT	MIDALE	3.332	14.30	0.00	14.30	0.476	0.000	0.476	0.244	0.232	26.686
BROWNING	FROBISHER-ALIDA	3.737	17.60	0.00	17.60	0.658	0.000	0.658	0.555	0.103	14.989
CANTAL	FROBISHER-ALIDA (VOL UNIT NO. 1)	0.185	38.00	0.00	38.00	0.070	0.000	0.070	0.055	0.015	1.808
	FROBISHER-ALIDA (NON-UNIT)	4.699	7.80	0.00	7.80	0.367	0.000	0.367	0.254	0.113	39.148
CANTAL SOUTH	FROBISHER-ALIDA	3.411	23.20	0.00	23.20	0.791	0.000	0.791	0.733	0.058	9.870
CARNDUFF	FROBISHER	5.091	11.44	0.00	11.44	0.582	0.000	0.582	0.543	0.039	8.272
CARNDUFF	MIDALE (EAST UNIT)	8.421	15.00	23.40	38.40	1.263	1.971	3.234	2.749	0.485	30.129
	MIDALE (SOUTH VOL UNIT)	1.089	10.00	1.50	11.50	0.109	0.016	0.125	0.089	0.036	7.010
	MIDALE (WEST UNIT)	3.421	13.00	30.40	43.40	0.445	1.040	1.485	1.436	0.049	10.659
	MIDALE (VOLUNTARY UNIT NO. 1)	0.433	14.20	17.20	31.40	0.061	0.074	0.135	0.065	0.070	6.845
	MIDALE (NON-UNIT)	2.379	7.50	2.80	10.30	0.178	0.067	0.245	0.174	0.071	10.164
CLARILAW	FROBISHER-ALIDA	0.631	23.20	0.00	23.20	0.146	0.000	0.146	0.111	0.035	4.541
CLAIRLAW WEST	FROBISHER-ALIDA (KISBEY VOL UNIT)	0.621	33.50	0.00	33.50	0.208	0.000	0.208	0.131	0.077	14.473
	FROBISHER-ALIDA (NON-UNIT)	0.210	14.70	0.00	14.70	0.031	0.000	0.031	0.014	0.017	3.703
CRYSTAL HILL	SOURIS VALLEY	0.752	13.50	0.00	13.50	0.102	0.000	0.102	0.086	0.016	3.481
DALESBORO	FROBISHER-ALIDA	0.099	29.90	0.00	29.90	0.030	0.000	0.030	0.028	0.002	0.564
EDENVALE	TILSTON	1.915	5.27	0.00	5.27	0.101	0.000	0.101	0.080	0.021	3.536
ELMORE	FROBISHER (VOLUNTARY UNIT)	5.019	26.00	12.90	40.90	1.405	0.647	2.052	1.781	0.271	29.794
	FROBISHER (NON-UNIT)	0.871	5.23	0.00	5.23	0.046	0.000	0.046	0.029	0.017	2.194
ELMORE	MIDALE	0.292	24.10	0.00	24.10	0.070	0.000	0.070	0.067	0.003	0.992
FERTILE	TILSTON	0.265	8.00	0.00	8.00	0.016	0.000	0.016	0.012	0.004	1.121
FERTILE	TILSTON-SOURIS VALLEY	0.369	2.70	0.00	2.70	0.010	0.000	0.010	0.009	0.001	0.269
FLAT LAKE	RATCLIFFE (VOLUNTARY UNIT NO. 1)	8.172	10.00	16.60	26.60	0.817	1.357	2.174	1.663	0.511	51.453
	RATCLIFFE (NON-UNIT)	1.341	3.30	0.00	3.30	0.044	0.000	0.044	0.018	0.026	3.400
FLORENCE	FROBISHER	1.070	10.90	0.00	10.90	0.117	0.000	0.117	0.114	0.003	1.182
FREDA LAKE	RATCLIFFE (VOLUNTARY UNIT NO. 1)	7.327	11.50	6.30	17.80	0.843	0.462	1.305	0.559	0.746	37.561
	RATCLIFFE (NON-UNIT)	1.692	8.50	0.00	8.50	0.144	0.000	0.144	0.064	0.080	11.110
FRYS	TILSTON-SOURIS VALLEY	2.601	5.60	0.00	5.60	0.146	0.000	0.146	0.118	0.028	4.919
FRYS EAST	TILSTON-SOURIS VALLEY	1.038	4.20	0.00	4.20	0.044	0.000	0.044	0.029	0.015	4.365
GAINSBOROUGH	FROBISHER-ALIDA (VOL UNIT)	1.090	10.00	5.30	15.30	0.109	0.058	0.167	0.137	0.030	2.656
	FROBISHER-ALIDA (NON-UNIT)	3.940	5.20	0.00	5.20	0.205	0.000	0.205	0.140	0.065	9.334
GAINSBOROUGH NORTH	FROBISHER-ALIDA	4.119	10.60	0.00	10.60	0.437	0.000	0.437	0.023	0.414	22.712
GLEN EWEN	FROBISHER	1.984	16.10	0.00	16.10	0.319	0.000	0.319	0.177	0.142	14.400

OIL RESERVOIR DATA

DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY —PER	AVERAGE CONNATE WATER CENT—	FORMATION VOLUME FACTOR	OIL DENSITY KG/M^3	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
64	7.38	10.0	40.0	1.111	–	–	MISSISSIPPIAN	–	MISCELLANEOUS	SOURIS VALLEY
11	2.50	28.0	25.0	1.010	–	–	CRET.-JURASSIC	–		WAPELLA
64	9.75	11.5	40.0	1.010	–	–	ORDOVICIAN	–		YEOMAN
									AREA IV - LIGHT	
680	2.53	18.3	43.0	1.378	823	1347	MISSISSIPPIAN	1958	ALAMEDA	MIDALE (CENTRAL UNIT)
2383	2.77	17.2	41.0	1.370	826	1347	MISSISSIPPIAN	1958		MIDALE (EAST UNIT)
421	3.44	16.6	43.0	1.370	–	1347	MISSISSIPPIAN	1958		MIDALE (NORTH UNIT)
906	3.35	14.5	45.0	1.351	–	1347	MISSISSIPPIAN	1958		MIDALE (SOUTH UNIT)
1784	4.30	11.0	42.0	1.370	842	1347	MISSISSIPPIAN	1958		MIDALE (NON-UNIT)
32	11.00	8.8	35.0	1.333	844	1361	MISSISSIPPIAN	1982	ALAMEDA WEST	FROBISHER
181	8.94	11.7	45.0	1.351	843	1356	MISSISSIPPIAN	1982	ALAMEDA WEST	MIDALE (VOLUNTARY UNIT NO. 1)
32	8.00	11.7	45.0	1.351	–	1356	MISSISSIPPIAN	1982		MIDALE (NON-UNIT)
1619	7.99	16.5	30.0	1.333	824	1122	MISSISSIPPIAN	1954	ALIDA EAST	FROBISHER-ALIDA (UNIT)
65	7.92	16.7	35.0	1.333	–	1122	MISSISSIPPIAN	1954		FROBISHER-ALIDA (NON-UNIT)
129	10.20	15.2	30.0	1.333	838	1143	MISSISSIPPIAN	1962	ALIDA NORTH	ALIDA
890	12.90	14.0	31.0	1.299	838	1143	MISSISSIPPIAN	1955	ALIDA WEST	FROBISHER-ALIDA
971	10.90	15.2	35.0	1.333	854	1199	MISSISSIPPIAN	1964	ARCOLA	FROBISHER-ALIDA
65	5.10	12.3	35.0	1.333	832	1197	MISSISSIPPIAN	1965	AUBURNTON	FROBISHER-ALIDA
340	12.25	8.9	30.0	1.124	832	1197	MISSISSIPPIAN	1965	BENSON	FROBISHER
550	12.80	8.7	35.0	1.176	852	1589	MISSISSIPPIAN	1960	BIENFAIT	MIDALE
615	12.10	10.3	35.0	1.333	853	1280	MISSISSIPPIAN	1957	BROWNING	FROBISHER-ALIDA
97	5.90	6.9	35.0	1.369	823	1196	MISSISSIPPIAN	1956	CANTAL	FROBISHER-ALIDA (VOL UNIT NO. 1)
712	10.10	13.4	35.0	1.333	834	1196	MISSISSIPPIAN	1956		FROBISHER-ALIDA (NON-UNIT)
696	15.00	8.7	35.0	1.333	826	1135	MISSISSIPPIAN	1956	CANTAL SOUTH	FROBISHER-ALIDA
955	8.22	13.3	35.0	1.333	854	1298	MISSISSIPPIAN	1956	CARNDUFF	FROBISHER
5568	2.0	14.4	30.0	1.333	844	1280	MISSISSIPPIAN	1955	CARNDUFF	MIDALE (EAST UNIT)
680	2.50	12.2	30.0	1.333	839	1280	MISSISSIPPIAN	1955		MIDALE (SOUTH VOL UNIT)
2104	2.40	12.9	30.0	1.333	844	1280	MISSISSIPPIAN	1955		MIDALE (WEST UNIT)
223	2.70	13.7	30.0	1.333	–	1280	MISSISSIPPIAN	1955		MIDALE (VOLUNTARY UNIT NO. 1)
666	5.90	11.9	35.0	1.333	835	1280	MISSISSIPPIAN	1956		MIDALE (NON-UNIT)
259	4.27	11.7	35.0	1.333	858	1231	MISSISSIPPIAN	1963	CLARLAW	FROBISHER-ALIDA
194	5.40	11.4	35.0	1.250	843	1234	MISSISSIPPIAN	1963	CLARLAW WEST	FROBISHER-ALIDA (OSBEY VOL UNIT)
49	8.50	9.7	35.0	1.250	843	1234	MISSISSIPPIAN	1963		FROBISHER-ALIDA (NON-UNIT)
259	5.86	9.2	40.0	1.111	861	1113	MISSISSIPPIAN	1966	CRYSTAL HILL	SOURIS VALLEY
32	5.40	11.8	35.0	1.333	853	1262	MISSISSIPPIAN	1966	DALESBORO	FROBISHER-ALIDA
356	7.97	12.5	40.0	1.111	853	1126	MISSISSIPPIAN	1963	EDENVALE	TILSTON
874	7.00	15.9	40.0	1.163	871	1219	MISSISSIPPIAN	1961	ELMORE	FROBISHER (VOLUNTARY UNIT)
194	8.96	10.6	45.0	1.163	875	1219	MISSISSIPPIAN	1961		FROBISHER (NON-UNIT)
194	2.71	11.4	35.0	1.333	841	1204	MISSISSIPPIAN	1961	ELMORE	MIDALE
49	6.87	14.6	40.0	1.111	860	953	MISSISSIPPIAN	1963	FERTILE	TILSTON
65	9.15	11.5	40.0	1.111	860	953	MISSISSIPPIAN	1956	FERTILE	TILSTON-SOURIS VALLEY
2426	5.64	14.1	49.0	1.205	865	1956	MISSISSIPPIAN	1965	FLAT LAKE	RATCLIFFE (VOLUNTARY UNIT NO. 1)
324	7.30	10.9	35.0	1.250	848	1956	MISSISSIPPIAN	1965		RATCLIFFE (NON-UNIT)
292	6.37	11.8	35.0	1.333	843	1290	MISSISSIPPIAN	1965	FLORENCE	FROBISHER
2855	2.30	23.7	43.5	1.116	870	1290	MISSISSIPPIAN	1965	FREDA LAKE	RATCLIFFE (VOLUNTARY UNIT NO. 1)
356	4.21	21.0	40.0	1.116	870	1694	MISSISSIPPIAN	1967		RATCLIFFE (NON-UNIT)
291	12.73	13.0	40.0	1.111	846	974	MISSISSIPPIAN	1958	FRYS	TILSTON-SOURIS VALLEY
113	13.91	12.2	40.0	1.111	846	974	MISSISSIPPIAN	1964	FRYS EAST	TILSTON-SOURIS VALLEY
243	6.40	11.5	30.0	1.149	858	1072	MISSISSIPPIAN	1956	GAINSBOROUGH	FROBISHER-ALIDA (VOL UNIT)
648	7.92	12.6	30.0	1.149	865	1072	MISSISSIPPIAN	1956		FROBISHER-ALIDA (NON-UNIT)
518	9.44	13.2	30.0	1.097	865	1077	MISSISSIPPIAN	1967	GAINSBOROUGH NORTH	FROBISHER-ALIDA
583	8.23	11.2	35.0	1.333	818	1304	MISSISSIPPIAN	1954	GLEN EWEN	FROBISHER

OIL RESERVES

POOL	PRODUCING HORIZON	INITIAL OIL IN PLACE MILLION CUBIC METRES	ESTIMATED RECOVERY PRIMARY	ENHANCED	TOTAL	INITIAL RESERVES PRIMARY	ENHANCED	TOTAL	CUMULATIVE PROD. DEC 31/88	REMAINING RESERVES	1988 PROD $1000\ m^3$
			PER CENT			MILLION CUBIC METRES					
GLEN EWEN	MIDALE (UNIT)	5.989	13.00	4.80	17.80	0.779	0.287	1.066	1.013	0.053	13.136
	MIDALE (NON-UNIT)	0.478	6.30	0.00	6.30	0.030	0.000	0.030	0.026	0.004	1.043
HASTINGS	FROBISHER (UNIT)	2.370	28.60	2.40	31.00	0.678	0.057	0.735	0.700	0.035	7.080
	FROBISHER (VOL UNIT NO. 1)	4.702	17.00	8.10	25.10	0.799	0.381	1.180	1.100	0.080	16.205
	FROBISHER (VOL UNIT NO. 2)	5.705	11.00	3.00	14.00	0.628	0.171	0.799	0.782	0.017	5.260
	FROBISHER (NON-UNIT)	17.426	13.10	0.00	13.10	2.283	0.000	2.283	1.859	0.424	65.385
HASTINGS EAST	FROBISHER	3.883	11.30	0.00	11.30	0.437	0.000	0.437	0.228	0.209	28.843
HASTINGS WEST	FROBISHER	1.385	8.20	0.00	8.20	0.114	0.000	0.114	0.036	0.078	9.095
HAZELWOOD	TILSTON	2.196	13.00	0.00	13.00	0.285	0.000	0.285	0.196	0.089	19.094
HAZELWOOD SOUTH	TILSTON	1.081	16.30	0.00	16.30	0.176	0.000	0.176	0.022	0.154	16.149
HAZELWOOD WEST	TILSTON	0.600	30.00	0.00	30.00	0.180	0.000	0.180	0.053	0.127	11.792
HOFFER	RATCLIFFE	2.503	11.00	0.00	11.00	0.275	0.000	0.275	0.185	0.090	11.376
HUMMINGBIRD	BAKKEN	0.525	29.50	0.00	29.50	0.155	0.000	0.155	0.041	0.114	13.717
HUMMINGBIRD	BIRDBEAR (VOLUNTARY UNIT NO. 1)	1.187	42.80	0.00	42.80	0.499	0.000	0.499	0.456	0.043	7.650
INGOLDSBY	FROBISHER-ALIDA (VOL UNIT)	6.242	42.10	0.00	42.10	2.628	0.000	2.628	2.263	0.365	31.645
	FROBISHER-ALIDA (NON-UNIT)	6.060	5.70	0.00	5.70	0.345	0.000	0.345	0.152	0.193	17.213
INGOLDSBY WEST	FROBISHER-ALIDA	0.677	12.60	0.00	12.60	0.085	0.000	0.085	0.020	0.065	7.402
KENOSEE	TILSTON (VOLUNTARY UNIT)	4.044	61.90	0.00	61.90	2.503	0.000	2.503	1.974	0.529	41.858
KISBEY	BIRDBEAR	1.452	18.80	0.00	18.80	0.273	0.000	0.273	0.163	0.110	13.614
KISBEY	FROBISHER-ALIDA	5.966	10.60	0.00	10.60	0.632	0.000	0.632	0.087	0.545	59.948
LIGHTNING	TILSTON	0.648	8.50	0.00	8.50	0.055	0.000	0.055	0.051	0.004	3.566
MOOSE MOUNTAIN	TILSTON	4.394	19.70	0.00	19.70	0.866	0.000	0.866	0.589	0.277	36.573
MORRISVIEW	FROBISHER-ALIDA	0.674	29.30	0.00	29.30	0.197	0.000	0.197	0.182	0.015	4.898
NORTH ANTLER	MIDALE (VOLUNTARY UNIT NO. 1)	0.757	8.00	4.90	12.90	0.061	0.037	0.098	0.098	0.000	0.626
NORTHGATE	FROBISHER	0.838	10.20	0.00	10.20	0.085	0.000	0.085	0.046	0.039	4.024
NORTHGATE	MIDALE (VOLUNTARY UNIT)	3.217	8.70	0.10	8.80	0.280	0.003	0.283	0.263	0.020	5.545
	MIDALE (NON UNIT)	0.036	24.70	0.00	24.70	0.009	0.000	0.009	0.008	0.001	0.736
NOTTINGHAM	ALIDA (NORTH ALIDA BEDS UNIT)	9.423	20.90	0.00	20.90	1.969	0.000	1.969	1.514	0.455	31.612
	ALIDA (NON-UNIT)	3.697	25.50	0.00	25.50	0.943	0.000	0.943	0.836	0.107	13.651
OAKLEY	FROBISHER	0.572	21.50	0.00	21.50	0.123	0.000	0.123	0.111	0.012	1.947
OUNGRE	RATCLIFFE (VOLUNTARY UNIT NO. 1)	14.470	8.00	8.20	16.20	1.158	1.187	2.345	1.201	1.144	51.707
	RATCLIFFE (NON-UNIT)	0.837	20.80	0.00	20.80	0.174	0.000	0.174	0.082	0.092	8.478
PARKMAN	SOURIS VALLEY	3.843	7.15	0.00	7.15	0.275	0.000	0.275	0.195	0.080	12.622
PARKMAN	TILSTON	2.077	13.90	0.00	13.90	0.289	0.000	0.289	0.172	0.117	22.029
PARKMAN	TILSTON-SOURIS VALLEY	32.167	14.60	0.00	14.60	4.696	0.000	4.696	3.469	1.227	129.345
PARKMAN SOUTH	TILSTON-SOURIS VALLEY	2.238	7.84	0.00	7.84	0.175	0.000	0.175	0.123	0.052	5.168
PINTO	FROBISHER	1.133	38.60	0.00	38.60	0.437	0.000	0.437	0.415	0.022	8.229
PINTO	MIDALE (SOUTH PINTO UNIT)	5.030	10.40	4.50	14.90	0.523	0.226	0.749	0.609	0.140	9.031
	MIDALE (NON-UNIT)	19.255	4.11	0.00	4.11	0.791	0.000	0.791	0.612	0.179	50.587
QUEENSDALE EAST	FROBISHER-ALIDA (NORTH CANTAL UNIT)	2.322	46.30	0.00	46.30	1.075	0.000	1.075	0.962	0.113	14.347
	FROBISHER-ALIDA (NON-UNIT)	15.472	45.10	0.00	45.10	6.978	0.000	6.978	4.739	2.239	192.544
QUEENSDALE NORTH	ALIDA	1.576	21.90	0.00	21.90	0.345	0.000	0.345	0.246	0.099	11.917
QUEENSDALE WEST	ALIDA	2.549	33.70	0.00	33.70	0.859	0.000	0.859	0.733	0.126	11.312
ROCANVILLE	BAKKEN SAND (VOL UNIT NO. 1)	1.609	22.75	5.22	27.97	0.366	0.084	0.450	0.252	0.198	7.110
	BAKKEN SAND (NON-UNIT)	0.717	11.90	0.00	11.90	0.085	0.000	0.085	0.066	0.019	3.345
RONCOTT	BAKKEN SAND	1.037	10.50	0.00	10.50	0.109	0.000	0.109	0.103	0.006	1.777
ROSEBANK	ALIDA (VOL UNIT NO. 1)	8.732	46.50	0.00	46.50	4.060	0.000	4.060	3.583	0.477	31.139
	ALIDA (NON-UNIT)	9.823	14.00	0.00	14.00	1.375	0.000	1.375	1.070	0.305	32.529
ROSEBANK SOUTH	ALIDA	1.664	17.60	0.00	17.60	0.293	0.000	0.293	0.152	0.141	14.555
SHERWOOD	FROBISHER	4.295	45.40	0.00	45.40	1.95	0.000	1.950	1.729	0.221	28.691
SILVERTON	FROBISHER	0.793	10.38	0.00	10.38	0.082	0.000	0.082	0.079	0.003	1.313
SKINNER LAKE	RATCLIFFE	3.748	16.20	0.00	16.20	0.607	0.000	0.607	0.282	0.325	17.910
SOURIS FLAT	FROBISHER	2.564	27.80	0.00	27.80	0.713	0.000	0.713	0.604	0.109	12.033
SOUTH FLETWODE	TILSTON	1.500	35.60	0.00	35.60	0.534	0.000	0.534	0.457	0.077	12.843
STAR VALLEY	FROBISHER-ALIDA	4.917	47.50	0.00	47.50	2.336	0.000	2.336	1.422	0.914	65.462
STEELMAN	FROBISHER (VOL UNIT NO. 1)	0.907	30.40	0.00	30.40	0.276	0.000	0.276	0.262	0.014	2.991

OIL RESERVOIR DATA

DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY —PER CENT—	AVERAGE CONNATE WATER —PER CENT—	FORMATION VOLUME FACTOR	OIL DENSITY KG/M^3	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
4209	2.13	13.7	35.0	1.333	828	1280	MISSISSIPPIAN	1954	GLEN EWEN	MIDALE (UNIT)
146	4.80	14.0	35.0	1.333	826	1280	MISSISSIPPIAN	1954		MIDALE (NON-UNIT)
502	6.49	14.8	37.0	1.282	833	1200	MISSISSIPPIAN	1955	HASTINGS	FROBISHER (UNIT)
1105	6.37	13.7	35.0	1.333	–	1200	MISSISSIPPIAN	1955		FROBISHER (VOL UNIT NO. 1)
971	6.10	19.6	37.0	1.282	843	1200	MISSISSIPPIAN	1955		FROBISHER (VOL UNIT NO. 2)
3237	10.40	11.5	40.0	1.333	842	1200	MISSISSIPPIAN	1955		FROBISHER (NON-UNIT)
1102	8.17	8.8	35.0	1.333	837	1147	MISSISSIPPIAN	1956	HASTINGS EAST	FROBISHER
490	5.47	10.8	35.0	1.333	837	1147	MISSISSIPPIAN	1963	HASTINGS WEST	FROBISHER
292	11.05	12.8	40.0	1.111	848	1149	MISSISSIPPIAN	1963	HAZELWOOD	TILSTON
194	7.42	13.9	40.0	1.111	848	1198	MISSISSIPPIAN	1958	HAZELWOOD SOUTH	TILSTON
115	6.44	15.0	40.0	1.111	848	1179	MISSISSIPPIAN	1983	HAZELWOOD WEST	TILSTON
863	6.60	11.0	35.0	1.250	878	1931	MISSISSIPPIAN	1964	HOFFER	RATCLIFFE
162	4.94	9.3	25.0	1.064	825	2226	MISSISSIPPIAN	1966	HUMMINGBIRD	BAKKEN
209	9.05	10.3	28.7	1.190	830	2326	DEVONIAN	1966	HUMMINGBIRD	BIRDBEAR (VOLUNTARY UNIT NO. 1)
907	8.69	13.0	30.0	1.149	865	1089	MISSISSIPPIAN	1955	INGOLDSBY	FROBISHER-ALIDA (VOL UNIT)
956	8.97	11.6	30.0	1.149	850	1089	MISSISSIPPIAN	1955		FROBISHER-ALIDA (NON-UNIT)
97	11.30	9.8	30.0	1.111	850	1096	MISSISSIPPIAN	1966	INGOLDSBY WEST	FROBISHER-ALIDA
996	4.88	16.0	35.0	1.250	848	1196	MISSISSIPPIAN	1958	KENOSEE	TILSTON (VOLUNTARY UNIT)
227	8.46	12.0	25.0	1.190	845	1626	DEVONIAN	1968	KISBEY	BIRDBEAR
697	9.45	15.3	26.0	1.250	840	1195	MISSISSIPPIAN	1985	KISBEY	FROBISHER-ALIDA
194	4.50	13.7	40.0	1.111	843	1058	MISSISSIPPIAN	1957	LIGHTNING	TILSTON
566	10.70	13.0	40.0	1.075	864	1188	MISSISSIPPIAN	1960	MOOSE MOUNTAIN	TILSTON
210	4.54	13.6	35.0	1.250	843	1266	MISSISSIPPIAN	1967	MORRISVIEW	FROBISHER-ALIDA
233	5.46	12.2	35.0	1.333	827	1152	MISSISSIPPIAN	1985	NORTH ANTLER	MIDALE (VOLUNTARY UNIT NO. 1)
356	5.61	8.6	35.0	1.333	843	1585	MISSISSIPPIAN	1963	NORTHGATE	FROBISHER
1456	4.84	15.6	55.0	1.538	836	1575	MISSISSIPPIAN	1963	NORTHGATE	MIDALE (VOLUNTARY UNIT)
16	3.84	14.3	45.0	1.333	837	1575	MISSISSIPPIAN	1963		MIDALE (NON UNIT)
1182	9.14	16.9	31.2	1.333	839	1066	MISSISSIPPIAN	1956	NOTTINGHAM	ALIDA (NORTH ALIDA BEDS UNIT)
712	6.49	15.5	31.2	1.333	846	1066	MISSISSIPPIAN	1956		ALIDA (NON-UNIT)
210	5.55	10.9	40.0	1.333	841	1196	MISSISSIPPIAN	1955	OAKLEY	FROBISHER
2784	6.52	17.9	45.0	1.235	878	1828	MISSISSIPPIAN	1959	OUNGRE	RATCLIFFE (VOLUNTARY UNIT NO. 1)
259	4.10	17.7	45.0	1.235	878	1828	MISSISSIPPIAN	1959		RATCLIFFE (NON-UNIT)
809	11.23	9.4	50.0	1.111	871	1188	MISSISSIPPIAN	1984	PARKMAN	SOURIS VALLEY
291	11.20	11.8	40.0	1.111	870	1060	MISSISSIPPIAN	1958	PARKMAN	TILSTON
3204	16.90	11.0	40.0	1.111	862	1097	MISSISSIPPIAN	1959	PARKMAN	TILSTON-SOURIS VALLEY
226	13.10	14.0	40.0	1.111	841	1096	MISSISSIPPIAN	1969	PARKMAN SOUTH	TILSTON-SOURIS VALLEY
631	4.58	9.5	45.0	1.333	848	1631	MISSISSIPPIAN	1957	PINTO	FROBISHER
2525	4.40	12.9	45.0	1.567	873	1615	MISSISSIPPIAN	1957	PINTO	MIDALE (SOUTH PINTO UNIT)
4257	8.51	10.9	35.0	1.333	834	1615	MISSISSIPPIAN	1957		MIDALE (NON-UNIT)
437	10.80	8.9	35.0	1.176	843	1173	MISSISSIPPIAN	1956	QUEENSDALE EAST	FROBISHER-ALIDA (NORTH CANTAL UNIT)
2638	8.10	13.1	35.0	1.176	850	1173	MISSISSIPPIAN	1956		FROBISHER-ALIDA (NON-UNIT)
275	7.30	16.1	35.0	1.333	851	1174	MISSISSIPPIAN	1959	QUEENSDALE NORTH	ALIDA
469	9.95	11.2	35.0	1.333	859	1204	MISSISSIPPIAN	1956	QUEENSDALE WEST	ALIDA
227	5.30	21.6	35.0	1.050	843	715	MISSISSIPPIAN	1957	ROCANVILLE	BAKKEN SAND (VOL UNIT NO. 1)
129	6.03	18.9	35.0	1.333	843	715	MISSISSIPPIAN	1957		BAKKEN SAND (NON-UNIT)
227	4.50	14.4	25.0	1.064	823	1822	MISSISSIPPIAN	1956	RONCOTT	BAKKEN SAND
971	13.70	12.5	30.0	1.333	828	1067	MISSISSIPPIAN	1955	ROSEBANK	ALIDA (VOL UNIT NO. 1)
971	15.00	14.2	37.5	1.316	841	1067	MISSISSIPPIAN	1955		ALIDA (NON-UNIT)
405	7.62	10.5	35.0	1.266	864	1074	MISSISSIPPIAN	1954	ROSEBANK SOUTH	ALIDA
405	11.50	16.5	35.0	1.163	880	1240	MISSISSIPPIAN	1963	SHERWOOD	FROBISHER
194	15.40	5.9	40.0	1.333	854	1204	MISSISSIPPIAN	1956	SILVERTON	FROBISHER
890	4.36	19.5	45.0	1.111	864	1723	MISSISSIPPIAN	1969	SKINNER LAKE	RATCLIFFE
648	6.10	13.3	35.0	1.333	861	1334	MISSISSIPPIAN	1965	SOURIS FLAT	FROBISHER
308	7.10	12.7	40.0	1.111	859	1143	MISSISSIPPIAN	1961	SOUTH FLETWODE	TILSTON
744	9.10	13.8	35.0	1.235	862	1162	MISSISSIPPIAN	1960	STAR VALLEY	FROBISHER-ALIDA
383	5.88	9.2	35.0	1.408	833	1409	MISSISSIPPIAN	1954	STEELMAN	FROBISHER (VOL UNIT NO. 1)

OIL RESERVES

POOL	PRODUCING HORIZON	INITIAL OIL IN PLACE MILLION CUBIC METRES	ESTIMATED RECOVERY PRIMARY	ESTIMATED RECOVERY ENHANCED	ESTIMATED RECOVERY TOTAL	INITIAL RESERVES PRIMARY	INITIAL RESERVES ENHANCED	INITIAL RESERVES TOTAL	CUMULATIVE PROD. DEC 31/88	REMAINING RESERVES	1988 PROD $1000\ m^3$
			PER CENT			MILLION CUBIC METRES					
STEELMAN	FROBISHER (DOUGLASTON UNIT)	0.850	25.90	0.00	25.90	0.220	0.000	0.220	0.206	0.014	2.032
	FROBISHER (NON-UNIT)	15.491	12.20	0.00	12.20	1.890	0.000	1.890	1.709	0.181	53.752
STEELMAN	MIDALE (UNIT IA)	18.404	16.00	32.20	48.20	2.945	5.926	8.871	8.440	0.431	71.878
	MIDALE (UNIT II)	16.848	23.00	31.90	54.90	3.829	5.311	9.140	7.917	1.223	85.937
	MIDALE (UNIT III)	11.465	16.00	26.10	42.10	1.834	2.992	4.826	4.125	0.701	64.165
	MIDALE (UNIT IV)	13.402	15.00	26.60	41.60	2.010	3.565	5.575	4.981	0.594	78.620
	MIDALE (UNIT V)	6.555	15.00	11.40	26.40	0.983	0.747	1.730	1.646	0.084	13.461
	MIDALE (UNIT VI)	24.826	16.00	23.00	39.00	3.972	5.710	9.682	8.938	0.744	78.689
	MIDALE (UNIT VII)	2.496	10.00	27.00	37.00	0.250	0.674	0.924	0.771	0.153	11.458
	MIDALE (DOUGLASTON UNIT)	2.255	12.30	18.40	30.70	0.277	0.415	0.692	0.463	0.229	14.235
	MIDALE (LAMPMAN UNIT)	0.934	13.00	13.20	26.20	0.121	0.123	0.244	0.228	0.016	3.268
	MIDALE (NORTH VOL UNIT NO. 1)	1.963	10.00	7.80	17.80	0.196	0.153	0.349	0.185	0.164	16.294
	MIDALE (NORTH VOL UNIT NO. 2)	1.875	5.30	0.00	5.30	0.099	0.000	0.099	0.090	0.009	4.795
	MIDALE (NON-UNIT)	7.037	11.27	0.43	11.70	0.793	0.030	0.823	0.670	0.153	33.521
STORTHOAKS	ALIDA-TILSTON	3.686	21.80	0.00	21.80	0.804	0.000	0.804	0.664	0.140	16.680
TABLELAND	WINNIPEGOSIS (VOL UNIT NO. 1)	0.658	17.90	14.90	32.80	0.118	0.098	0.216	0.069	0.147	16.203
	WINNIPEGOSIS (NON-UNIT)	0.149	57.00	0.00	57.00	0.085	0.000	0.085	0.019	0.066	13.678
VIEWFIELD	FROBISHER (VOLUNTARY UNIT NO. 1)	1.479	11.40	0.00	11.40	0.169	0.000	0.169	0.165	0.004	3.376
	FROBISHER (NON-UNIT)	5.891	13.60	0.00	13.60	0.801	0.000	0.801	0.642	0.159	26.675
WARMLEY	ALIDA (FLETWODE ALIDA VOL UNIT)	0.773	27.90	0.00	27.90	0.216	0.000	0.216	0.149	0.067	5.847
WAUCHOPE	ALIDA-TILSTON	1.788	14.80	0.00	14.80	0.265	0.000	0.265	0.148	0.117	27.041
WAUCHOPE NORTH	TILSTON	0.412	14.35	0.00	14.35	0.059	0.000	0.059	0.047	0.012	4.048
WEYBURN	MIDALE	1.550	3.54	0.00	3.54	0.055	0.000	0.055	0.037	0.018	9.393
WHITE BEAR	TILSTON	3.694	40.90	0.00	40.90	1.511	0.000	1.511	1.062	0.449	44.964
WHITE BEAR	TILSTON-SOURIS VALLEY	1.077	15.06	0.00	15.06	0.162	0.000	0.162	0.118	0.044	18.261
WILDWOOD	ALIDA	0.967	16.80	0.00	16.80	0.162	0.000	0.162	0.137	0.025	4.553
WILLMAR	FROBISHER-ALIDA (VOL UNIT NO. 1)	4.857	17.00	23.66	40.66	0.826	1.149	1.975	1.647	0.328	38.857
	FROBISHER-ALIDA (N CENTRAL VOL UNIT)	1.216	14.00	5.60	19.60	0.170	0.068	0.238	0.222	0.016	4.202
	FROBISHER-ALIDA (N DALES UNIT NO. 1)	1.151	35.00	13.00	48.00	0.403	0.150	0.553	0.520	0.033	5.527
	FROBISHER-ALIDA (KISBEY SD VOL UNIT)	0.255	50.70	0.00	50.70	0.129	0.000	0.129	0.121	0.008	1.268
	FROBISHER-ALIDA (NON-UNIT)	16.889	18.35	0.50	18.85	3.099	0.084	3.183	2.396	0.787	75.477
WINMORE	FROBISHER	0.558	6.91	0.00	6.91	0.039	0.000	0.039	0.035	0.004	2.942
WORDSWORTH	FROBISHER-ALIDA	6.603	8.05	0.00	8.05	0.532	0.000	0.532	0.437	0.095	20.589
WORKMAN	FROBISHER (VOLUNTARY UNIT NO. 1)	5.025	16.70	20.30	37.00	0.839	1.020	1.859	1.704	0.155	22.728
	FROBISHER (NON-UNIT)	6.943	22.00	0.00	22.00	1.527	0.000	1.527	1.235	0.292	49.266
WORKMAN	MIDALE (VOLUNTARY UNIT NO. 1)	1.041	17.80	6.30	24.10	0.185	0.066	0.251	0.249	0.002	0.971
	MIDALE (VOLUNTARY UNIT NO. 2)	0.841	10.60	10.80	21.40	0.089	0.091	0.180	0.164	0.016	1.725
	MIDALE (NON-UNIT)	2.117	7.15	0.00	7.15	0.151	0.000	0.151	0.149	0.002	1.696
MISCELLANEOUS	ALIDA	4.609	3.40	0.00	3.40	0.157	0.000	0.157	0.130	0.027	16.003
	BAKKEN	1.886	11.80	0.00	11.80	0.223	0.000	0.223	0.098	0.125	16.731
	BIRDBEAR	0.117	7.00	0.00	7.00	0.008	0.000	0.008	0.005	0.003	1.018
	FROBISHER	14.487	3.79	0.00	3.79	0.549	0.000	0.549	0.355	0.194	40.425
	FROBISHER-ALIDA	7.272	5.60	0.00	5.60	0.407	0.000	0.407	0.348	0.059	15.676
	LOWER WATROUS	0.353	6.20	0.00	6.20	0.022	0.000	0.022	0.021	0.001	1.031
	MIDALE	4.744	6.00	0.00	6.00	0.285	0.000	0.285	0.183	0.102	21.689
	RATCLIFFE	0.918	4.10	0.00	4.10	0.038	0.000	0.038	0.018	0.020	3.313
	RED RIVER	0.901	5.90	0.00	5.90	0.053	0.000	0.053	0.051	0.002	0.692
	SOURIS VALLEY	2.926	1.50	0.00	1.50	0.044	0.000	0.044	0.027	0.017	3.923
	TILSTON	4.252	2.20	0.00	2.20	0.094	0.000	0.094	0.049	0.045	7.891
	TILSTON-SOURIS VALLEY	0.180	0.10	0.00	0.10	0.000	0.000	0.000	0.000	0.000	0.000
	WINNIPEGOSIS	6.788	3.90	0.00	3.90	0.265	0.000	0.265	0.042	0.223	27.026
	YEOMAN	0.208	9.50	0.00	9.50	0.020	0.000	0.020	0.020	0.000	0.000
	TOTAL AREA IV LIGHT	**613.976**				**102.724**	**38.352**	**141.076**	**112.949**	**28.127**	**3089.188**
	PROVINCIAL TOTAL	**3415.956**				**295.679**	**183.762**	**479.441**	**358.741**	**120.700**	**12242.224**

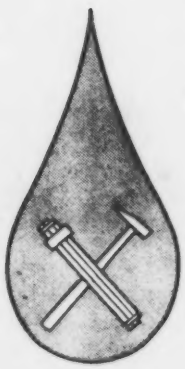
OIL RESERVOIR DATA

DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY —PER CENT—	AVERAGE CONNATE WATER —PER CENT—	FORMATION VOLUME FACTOR	OIL DENSITY KG/M^3	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
227	7.60	10.1	35.0	1.333	848	1409	MISSISSIPPIAN	1954	STEELMAN	FROBISHER (DOUGLASTON UNIT)
3350	8.70	10.9	35.0	1.333	849	1409	MISSISSIPPIAN	1954		FROBISHER (NON-UNIT)
5463	4.21	17.1	35.0	1.389	843	1399	MISSISSIPPIAN	1954	STEELMAN	MIDALE (UNIT IA)
2072	9.50	18.5	28.8	1.389	858	1399	MISSISSIPPIAN	1954		MIDALE (UNIT II)
2818	4.60	18.9	35.0	1.389	827	1399	MISSISSIPPIAN	1954		MIDALE (UNIT III)
5308	3.29	16.4	35.0	1.389	824	1399	MISSISSIPPIAN	1954		MIDALE (UNIT IV)
2849	3.30	14.9	35.0	1.389	83[illegible]	1399	MISSISSIPPIAN	1954		MIDALE (UNIT V)
6685	5.12	15.5	35.0	1.389	843	1399	MISSISSIPPIAN	1954		MIDALE (UNIT VI)
713	4.18	17.9	35.0	1.389	870	1399	MISSISSIPPIAN	1954		MIDALE (UNIT VII)
745	4.20	15.4	35.0	1.389	–	1399	MISSISSIPPIAN	1954		MIDALE (DOUGLASTON UNIT)
437	2.32	18.6	31.2	1.389	862	1399	MISSISSIPPIAN	1954		MIDALE (LAMPMAN UNIT)
971	4.13	10.0	32.0	1.389	–	1399	MISSISSIPPIAN	1954		MIDALE (NORTH VOL UNIT NO. 1)
551	6.10	12.3	37.0	1.389	–	1399	MISSISSIPPIAN	1954		MIDALE (NORTH VOL UNIT NO. 2)
3123	4.50	10.7	35.0	1.389	846	1399	MISSISSIPPIAN	1954		MIDALE (NON-UNIT)
697	6.35	14.4	35.0	1.124	842	1068	MISSISSIPPIAN	1962	STORTHOAKS	ALIDA-TILSTON
68	14.58	12.2	18.4	1.500	727	2576	MISSISSIPPIAN	1975	TABLELAND	WINNIPEGOSIS (VOL UNIT NO. 1)
35	10.49	7.5	19.0	1.500	727	2576	MISSISSIPPIAN	1975		WINNIPEGOSIS (NON-UNIT)
129	17.10	12.0	35.0	1.163	873	1270	MISSISSIPPIAN	1969	VIEWFIELD	FROBISHER (VOLUNTARY UNIT NO. 1)
372	25.30	11.2	35.0	1.163	838	1270	MISSISSIPPIAN	1969		FROBISHER (NON-UNIT)
401	3.20	11.4	40.0	1.136	860	1242	MISSISSIPPIAN	1966	WARMLEY	ALIDA (FLETWODE ALIDA VOL UNIT)
259	6.60	19.6	40.0	1.124	852	1140	MISSISSIPPIAN	1980	WAUCHOPE	ALIDA-TILSTON
113	4.50	15.0	40.0	1.111	852	1083	MISSISSIPPIAN	1971	WAUCHOPE NORTH	TILSTON
178	10.28	13.8	31.0	1.124	877	1377	MISSISSIPPIAN	1954	WEYBURN	MIDALE
405	13.30	12.7	40.0	1.111	862	1080	MISSISSIPPIAN	1957	WHITE BEAR	TILSTON
308	7.53	8.8	40.0	1.111	853	1189	MISSISSIPPIAN	1983	WHITE BEAR	TILSTON-SOURIS VALLEY
162	8.50	14.4	35.0	1.333	852	1184	MISSISSIPPIAN	1966	WILDWOOD	ALIDA
1084	6.10	12.9	27.0	1.282	843	1249	MISSISSIPPIAN	1957	WILLMAR	FROBISHER-ALIDA (VOL UNIT NO. 1)
324	6.25	11.0	30.0	1.282	843	1249	MISSISSIPPIAN	1957		FROBISHER-ALIDA (N CENTRAL VOL UNIT)
388	5.91	9.9	35.0	1.282	843	1249	MISSISSIPPIAN	1957		FROBISHER-ALIDA (N DALES UNIT NO. 1)
81	3.41	20.0	40.0	1.299	843	1249	MISSISSIPPIAN	1957		FROBISHER-ALIDA (KISBEY SD VOL UNIT)
2363	11.00	11.9	30.0	1.282	861	1249	MISSISSIPPIAN	1957		FROBISHER-ALIDA (NON-UNIT)
259	4.70	9.7	45.0	1.163	869	1140	MISSISSIPPIAN	1968	WINMORE	FROBISHER
955	11.15	10.6	25.0	1.282	853	1257	MISSISSIPPIAN	1962	WORDSWORTH	FROBISHER-ALIDA
1748	4.51	13.1	42.1	1.190	844	1237	MISSISSIPPIAN	1959	WORKMAN	FROBISHER (VOLUNTARY UNIT NO. 1)
2800	4.90	10.4	42.1	1.190	861	1237	MISSISSIPPIAN	1959		FROBISHER (NON-UNIT)
671	1.92	14.8	35.0	1.190	838	1230	MISSISSIPPIAN	1960	WORKMAN	MIDALE (VOLUNTARY UNIT NO. 1)
356	3.14	15.7	39.3	1.266	838	1230	MISSISSIPPIAN	1960		MIDALE (VOLUNTARY UNIT NO. 2)
567	7.08	10.3	35.0	1.266	844	1230	MISSISSIPPIAN	1960		MIDALE (NON-UNIT)
1199	5.84	13.5	35.0	1.333	–	–	MISSISSIPPIAN	–	MISCELLANEOUS	ALIDA
583	3.40	13.5	25.0	1.064	–	–	MISSISSIPPIAN	–		BAKKEN
65	2.50	11.3	25.0	1.176	–	–	DEVONIAN	–		BIRDBEAR
3289	8.77	10.3	35.0	1.333	–	–	MISSISSIPPIAN	–		FROBISHER
1361	7.94	13.8	35.0	1.333	–	–	MISSISSIPPIAN	–		FROBISHER-ALIDA
194	2.30	16.0	45.0	1.111	–	–	MISSISSIPPIAN	–		LOWER WATROUS
1620	5.72	10.5	35.0	1.333	–	–	MISSISSIPPIAN	–		MIDALE
162	7.25	16.0	35.0	1.333	–	–	MISSISSIPPIAN	–		RATCLIFFE
194	13.80	8.9	35.0	1.333	–	–	ORDOVICIAN	–		RED RIVER
397	14.24	11.5	50.0	1.111	–	–	MISSISSIPPIAN	–		SOURIS VALLEY
745	7.77	13.6	40.0	1.111	–	–	MISSISSIPPIAN	–		TILSTON
84	7.90	7.9	50.0	1.111	–	–	MISSISSIPPIAN	–		TILSTON-SOURIS VALLEY
421	29.37	9.8	30.0	1.250	–	–	DEVONIAN	–		WINNIPEGOSIS
32	14.33	9.3	35.0	1.333	–	–	ORDOVICIAN	–		YEOMAN

RESERVOIR DATA

RESERVES AND

PRODUCTION—GAS



FIVE YEAR GAS SUMMARY

	1984	1985	1986	1987	1988
INITIAL ESTABLISHED RESERVES (Million Cubic Metres)					
Non-Associated	84 415.1	90 679.9	96 103.9	100 408.3	109 616.2
Associated	1 683.5	1 822.6	1 949.0	1 922.5	1 922.5
Dissolved	5 972.5	6 535.2	7 561.5	7 602.6	7 602.6
PROVINCIAL TOTAL	92 071.1	99 037.7	105 614.4	109 933.4	119 141.3
REMAINING ESTABLISHED RESERVES (Million Cubic Metres)					
Non-Associated	56 407.4	61 008.5	64 434.6	66 487.0	71 897.7
Associated	837.4	942.9	1 039.0	983.4	961.0
Dissolved	994.2	1 316.1	2 078.2	1 812.0	1 510.2
PROVINCIAL TOTAL	58 239.0	63 267.5	67 551.8	69 282.4	74 368.9
YEARLY PRODUCTION (Million Cubic Metres)					
Non-Associated	1 445.2	1 639.7	1 998.6	2 228.1	3 765.1
Associated	3.9	23.5	30.2	29.3	22.4
Dissolved	188.3	240.8	264.2	307.3	301.8
PROVINCIAL TOTAL	1 637.4	1 904.0	2 293.0	2 564.7	4 089.3
NUMBER OF PRODUCING WELLS					
Non-Associated	1 040	1 545	2 070	2 331	3 311
Associated	7	15	15	15	15
PROVINCIAL TOTAL	1 047	1 560	2 085	2 346	3 326
AVERAGE DAILY PRODUCTION (Million Cubic Metres Per Day)					
Non-Associated	7.705	8.981	9.492	11.049	18.760
Associated	0.047	0.092	0.084	0.081	0.073
Dissolved	0.516	0.659	0.724	0.844	0.826
PROVINCIAL TOTAL	8.268	9.732	10.300	11.974	19.659

NATURAL GAS RESERVES

POOL	PRODUCING HORIZON	INITIAL GAS IN PLACE MILLION CUBIC METRES	RESERVOIR RECOVERY PER CENT	SURFACE LOSSES PER CENT	INITIAL ESTABLISHED RESERVES	CUMULATIVE PRODUCTION DEC 31/88	REMAINING RESERVES DEC 31/88	ESTIMATED HEATING VALUE MJ/m3
		——MILLION CUBIC METRES——						
NON-ASSOCIATED GAS RESERVES								
BAYHURST	VIKING (VOLUNTARY UNIT)	2 567.7	80	5	1 951.5	1 892.6	58.9	37.4
BAYHURST WEST	VIKING (VOLUNTARY UNIT)	304.7	75	5	217.1	193.2	23.9	35.6
BEACON HILL	MANNVILLE	4 541.7	85	5	3 667.4	1 622.1	2 045.3	35.6
BEACON HILL WEST	MANNVILLE SAND	571.2	80	5	434.1	160.0	274.1	35.9
BEVERLEY EAST	CANTUAR SAND (VOL UNIT NO. 1)	378.0	90	5	323.2	251.7	71.5	38.9
BIGSTICK	SECOND WHITE SPECKS	15 530.5	84	5	12 393.3	1 775.6	10 617.7	35.6
BROCK	VIKING UNIT	785.2	80	5	581.6	568.2	13.4	36.3
BROCK EAST	VIKING SAND	310.0	35	5	103.1	10.7	92.4	34.6
BRONSON LAKE	COLONY SAND	314.5	80	5	239.0	6.1	232.9	35.9
	WASECA SAND	22.1	75	5	15.7	0.3	15.4	36.3
BURSTALL	MEDICINE HAT SAND	401.7	80	5	305.3	6.9		35.4
	MILK RIVER	283.3	65	5	174.9	6.7	378.5	35.4
	MILK RIVER-MEDICINE HAT	–	–	–	–	68.1		35.4
BURSTALL NORTH	VIKING SAND	231.9	80	5	176.2	54.7	121.5	35.6
CAVALIER	SPINNEY HILL SAND	120.0	80	5	91.2	84.8	6.4	32.4
COLEVILLE-SMILEY	VIKING (UNIT)	6 978.7	85	5	5 635.3	5 068.5	566.8	38.4
	VIKING (NON-UNIT)	58.4	80	5	44.4	34.5	9.9	38.3
CRANE LAKE	MILK RIVER	459.7	65	5	283.9	23.0	260.8	35.4
CRANE LAKE SOUTH	SECOND WHITE SPECKS	2 832.5	75	5	2 016.2	71.5	1 946.7	35.4
DODSLAND NORTH	VIKING SAND (UNIT)	843.4	80	5	641.0	483.6	157.4	40.7
	VIKING SAND (NON-UNIT)	2 163.0	85	5	1 336.7	137.9	1 197.8	40.7
DRIVER	BAKKEN SAND	259.7	75	5	185.0	41.6	143.4	37.2
	MANNVILLE SAND	279.5	75	5	199.1	55.4	143.7	37.1
FORT PITT	MANNVILLE SAND	356.0	80	5	270.6	89.2	181.4	35.9
FORT PITT NORTH	COLONY SAND	483.6	80	5	352.3	171.7	180.6	37.0
FORT PITT NORTH	WASECA SAND	21.4	75	5	15.2	1.9	13.3	35.8
FREEFIGHT	MILK RIVER	1 543.4	65	5	953.0	29.7	923.3	35.4
GLIDDEN	VIKING SAND (VOL UNIT NO. 1)	476.3	20	5	90.5	90.5	0.0	35.8
GREENAN	VIKING SAND	1 347.9	30	5	384.2	323.8	60.4	35.2
GULL LAKE	CANTUAR SAND	796.7	70	5	529.8	488.9	40.9	38.4
HATTON	MEDICINE HAT SAND (UNIT)	9 571.3	80	5	5 222.2	4 180.4	1 041.8	38.4
	MEDICINE HAT SAND (AGREEMENT AREA)	1 969.2	80	5	1 496.6	737.0	759.6	35.4
	MEDICINE HAT SAND (NON-UNIT)	12 228.1	80	5	9 293.4	2 029.7		35.4
	MILK RIVER	49 816.0	65	5	30 761.4	5 005.8	29 703.0	35.4
	MILK RIVER - MEDICINE HAT	–	–	–	–	3 319.3		35.4
HOOSIER	VIKING SAND (UNIT)	4 643.4	80	5	2 646.7	2 414.7	232.0	37.3
	VIKING SAND (NON-UNIT)	35.1	80	5	20.0	20.0	0.0	37.3
INGEBRIGT	MILK RIVER	3 253.3	65	5	2 008.9	270.6	1 738.3	35.4
LIEBENTHAL	MILK RIVER	418.9	65	5	258.7	186.2	72.5	35.4
LLOYDMINSTER	COLONY SAND	286.5	85	5	231.3	222.3	9.0	34.4
LOVERNA NORTH	MANNVILLE SAND	41.6	75	5	29.6	0.7	28.9	37.3
LOVERNA WEST	BAKKEN SAND	214.3	75	5	152.7	3.7	149.0	39.1
LOVERNA SOUTH	BAKKEN SAND	467.7	80	5	355.5	297.3	58.2	37.4
	VIKING SAND	236.1	75	5	170.4	154.5	15.9	37.9
MARENGO	VIKING SAND	323.7	80	5	246.0	0.6	245.4	36.3
MILTON	VIKING SAND	1 047.2	85	5	845.6	810.3	35.3	37.3
PIERCELAND	MANNVILLE SAND	1 581.1	93	5	1 396.9	619.7	777.2	36.5
SENATE	SECOND WHITE SPECKS	215.8	70	5	143.5	0.8	142.7	35.8
SUPERB	BAKKEN SAND	327.9	80	5	249.2	0.8	248.4	37.1
TANGLEFLAGS	COLONY SAND	625.0	75	5	445.3	330.0	115.3	35.9
	MCLAREN SAND	519.3	75	5	370.0	209.9	160.1	35.6
	SECOND WHITE SPECKS	112.5	75	5	80.2	33.1	47.1	36.1
	ST.WALBURG SAND	123.8	75	5	88.0	33.9	54.1	35.8
TOTNES	VIKING SAND (VOLUNTARY UNIT)	485.8	80	5	364.0	301.2	62.8	35.5
	VIKING SAND (NON-UNIT)	155.2	80	5	118.0	1.6	116.4	35.5

NATURAL GAS RESERVOIR DATA

1988 PRODUCTION YEARLY TOTAL MILLION m^3	DAILY AVERAGE MILLION m^3/DAY	DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY —PER CENT—	AVERAGE CONNATE WATER —PER CENT—	SPECIFIC GRAVITY	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
											NON-ASSOCIATED GAS RESERVES
21.506	0.382	6 900	2.71	25.0	35.0	0.560	691	CRETACEOUS	1956	BAYHURST	VIKING (VOLUNTARY UNIT)
3.019	0.023	1 333	1.62	30.5	35.0	0.580	696	CRETACEOUS	1986	BAYHURST WEST	VIKING (VOLUNTARY UNIT)
27.526	0.286	21 107	4.66	35.0	40.0	0.569	274	CRETACEOUS	1963	BEACON HILL	MANNVILLE
37.789	0.130	1 813	6.30	35.0	40.0	0.573	310	CRETACEOUS	1978	BEACON HILL WEST	MANNVILLE SAND
9.436	0.032	874	2.53	28.1	33.0	0.563	972	CRETACEOUS	1986	BEVERLEY EAST	CANTUAR SAND (VOL UNIT NO. 1)
888.414	3.131	66 031	2.54	20.4	30.0	0.560	692	CRETACEOUS	1960	BIGSTICK	SECOND WHITE SPECKS
2.342	0.008	5 698	2.19	14.5	40.0	0.568	716	CRETACEOUS	1951	BROCK	VIKING UNIT
0.000	0.000	3 108	0.91	24.0	40.0	0.587	720	CRETACEOUS	1987	BROCK EAST	VIKING SAND
6.083	0.183	1 278	4.54	28.0	28.0	0.574	458	CRETACEOUS	1974	BRONSON LAKE	COLONY SAND
0.328	0.010	266	2.02	22.5	43.0	0.570	457	CRETACEOUS	1968		WASECA SAND
1.232	0.004	3 665	2.30	16.0	50.0	0.575	520	CRETACEOUS	1952	BURSTALL	MEDICINE HAT SAND
0.933	0.003	3 665	2.20	16.0	45.0	0.574	460	CRETACEOUS	1952		MILK RIVER
23.672	0.069	–	–	–	–	–	–	CRETACEOUS	1952		MILK RIVER-MEDICINE HAT
19.512	0.086	1 011	1.90	26.0	45.0	0.580	746	CRETACEOUS	1973	BURSTALL NORTH	VIKING SAND
0.000	0.000	1 518	1.22	25.0	30.0	0.620	400	CRETACEOUS	1972	CAVALIER	SPINNEY HILL SAND
39.553	0.176	20 979	3.05	22.5	32.0	0.600	696	CRETACEOUS	1961	COLEVILLE-SMILEY	VIKING (UNIT)
0.724	0.002	226	2.44	25.5	32.0	0.606	696	CRETACEOUS	1961		VIKING (NON-UNIT)
8.276	0.036	1 296	10.49	16.0	45.0	0.574	442	CRETACEOUS	1970	CRANE LAKE	MILK RIVER
64.714	0.982	19 813	2.61	14.0	41.0	0.572	700	CRETACEOUS	1983	CRANE LAKE SOUTH	SECOND WHITE SPECKS
11.585	0.053	4 452	2.01	22.4	35.0	0.615	699	CRETACEOUS	1963	DODSLAND NORTH	VIKING SAND (UNIT)
33.915	0.165	12 756	1.80	22.4	35.0	0.621	699	CRETACEOUS	1963		VIKING SAND (NON-UNIT)
33.816	0.102	999	2.66	17.0	25.0	0.564	900	MISSISSIPPIAN	1985	DRIVER	BAKKEN SAND
38.699	0.115	1 222	2.27	24.5	45.0	0.578	749	CRETACEOUS	1985		MANNVILLE SAND
14.565	0.064	1 275	5.12	23.2	15.5	0.578	388	CRETACEOUS	1972	FORT PITT	MANNVILLE SAND
29.634	0.124	1 981	3.73	27.2	17.9	0.566	473	CRETACEOUS	1971	FORT PITT	MANNVILLE SAND
1.937	0.036	259	1.50	32.0	43.0	0.575	495	CRETACEOUS	1988	FORT PITT NORTH	MANNVILLE SAND
29.596	1.182	8 871	5.48	16.0	45.0	0.574	434	CRETACEOUS	1970	FREEFIGHT	MILK RIVER
2.571	0.011	5 878	0.86	21.2	40.0	0.564	694	CRETACEOUS	1953	GLIDDEN	VIKING SAND (VOL UNIT NO. 1)
5.077	0.028	5 952	1.96	24.6	35.0	0.596	656	CRETACEOUS	1988	GREENAN	VIKING SAND
3.749	0.022	2 011	3.14	23.0	45.0	0.598	1 057	CRETACEOUS	1987	GULL LAKE	CANTUAR SAND
72.187	0.519	43 491	3.26	21.0	50.0	0.575	477	CRETACEOUS	1953	HATTON	MEDICINE HAT SAND (UNIT)
14.681	0.071	13 727	2.96	21.0	50.0	0.575	477	CRETACEOUS	1953		MEDICINE HAT SAND (AGREEMENT AREA)
104.268	0.473	105 616	2.74	18.3	50.0	0.575	477	CRETACEOUS	1953		MEDICINE HAT SAND (NON-UNIT)
565.082	3.031	156 219	9.62	16.0	45.0	0.574	326	CRETACEOUS	1953		MILK RIVER
1 076.006	3.902	–	–	–	–	–	–	CRETACEOUS	1953		MILK RIVER - MEDICINE HAT
15.913	0.091	12 488	3.32	23.0	32.0	0.600	732	CRETACEOUS	1953	HOOSIER	VIKING SAND (UNIT)
0.000	0.000	129	3.81	23.0	32.0	0.600	732	CRETACEOUS	1953		VIKING SAND (NON-UNIT)
129.300	0.595	15 022	6.49	16.0	45.0	0.574	414	CRETACEOUS	1970	INGEBRIGT	MILK RIVER
14.843	0.052	5 915	2.03	16.0	45.0	0.576	396	CRETACEOUS	1974	LIEBENTHAL	MILK RIVER
0.865	0.011	1 101	4.16	25.0	30.0	0.568	518	CRETACEOUS	1988	LLOYDMINSTER	COLONY SAND
0.736	0.025	259	1.82	24.7	56.3	0.578	766	CRETACEOUS	1973	LOVERNA NORTH	MANNVILLE SAND
3.656	0.079	593	4.06	17.0	40.0	0.605	844	MISSISSIPPIAN	1980	LOVERNA WEST	BAKKEN SAND
8.552	0.043	1 613	2.06	20.2	21.0	0.560	826	MISSISSIPPIAN	1973	LOVERNA SOUTH	BAKKEN SAND
4.967	0.027	2 056	2.01	22.5	53.0	0.582	699	CRETACEOUS	1973		VIKING SAND
0.000	0.000	1 410	1.88	25.0	35.0	0.578	726	CRETACEOUS	1954	MARENGO	VIKING SAND
3.813	0.017	4 887	1.74	25.0	32.0	0.604	732	CRETACEOUS	1954	MILTON	VIKING SAND
21.199	0.317	3 818	9.27	35.0	40.0	0.564	272	CRETACEOUS	1988	PIERCELAND	MANNVILLE SAND
0.377	0.004	777	3.05	23.0	40.0	0.578	606	CRETACEOUS	1971	SENATE	SECOND WHITE SPECKS
0.647	0.018	586	3.96	24.7	25.8	0.600	796	MISSISSIPPIAN	1985	SUPERB	BAKKEN SAND
18.581	0.072	999	6.90	33.5	15.0	0.600	486	CRETACEOUS	1985	TANGLEFLAGS	COLONY SAND
11.662	0.044	1 258	5.20	31.8	25.0	0.591	475	CRETACEOUS	1986		MCLAREN SAND
7.911	0.028	1 234	1.50	32.0	40.0	0.591	298	CRETACEOUS	1986		SECOND WHITE SPECKS
6.176	0.024	713	2.50	33.0	40.0	0.581	315	CRETACEOUS	1986		ST.WALBURG SAND
3.813	0.022	1 554	2.71	25.0	40.0	0.584	613	CRETACEOUS	1988	TOTNES	VIKING SAND (VOLUNTARY UNIT)
0.000	0.000	518	2.71	25.0	40.0	0.584	613	CRETACEOUS	1988		VIKING SAND (NON-UNIT)

NATURAL GAS RESERVES

POOL	PRODUCING HORIZON	INITIAL GAS IN PLACE MILLION CUBIC METRES	RESERVOIR RECOVERY PER CENT	SURFACE LOSSES PER CENT	INITIAL ESTABLISHED RESERVES	CUMULATIVE PRODUCTION DEC 31/88	REMAINING RESERVES DEC 31/88	ESTIMATED HEATING VALUE MJ/m3
		——MILLION CUBIC METRES——						
UNITY FIELD	SPARKY SAND	72.0	73	5	49.9	18.0	31.9	35.2
	UNITY SAND	312.3	90	5	267.0	267.0	0.0	33.8
	VIKING SAND	74.0	65	5	45.7	20.5	25.2	37.4
WHEAT VALLEY	CANTUAR SAND	338.0	80	5	256.9	2.7	254.2	37.9
WHITESIDE	RIBSTONE CREEK SAND (VOL UNIT)	608.3	85	5	491.2	441.8	49.6	37.4
WHITESIDE WEST	RIBSTONE CREEK SAND	118.1	80	5	89.8	54.8	35.0	38.0
	VIKING SAND	872.4	25	5	207.2	39.6	167.6	39.1
MISCELLANEOUS	ALIDA	48.9	–	–	39.5	6.1	33.4	39.9
	BAKKEN	1 428.4	–	–	1 051.6	198.5	853.1	37.8
	CANTUAR	235.9	–	–	134.8	59.4	75.4	35.2
	COLONY	6 376.5	–	–	4 767.9	567.0	4 200.9	34.4
	CUMMINGS	13.6	–	–	10.3	6.6	3.7	36.6
	DETRITAL	666.5	–	–	504.0	2.2	501.8	38.0
	LLOYDMINSTER	111.9	–	–	82.7	32.6	50.1	34.4
	MANNVILLE	5 026.2	–	–	3 678.5	146.6	3 531.9	37.4
	MCLAREN	1 174.1	–	–	875.8	561.1	314.7	34.4
	MILK RIVER	622.7	–	–	384.4	0.0	384.4	35.9
	REX	90.3	–	–	68.3	12.3	56.0	34.4
	RIBSTONE CREEK	243.0	–	–	171.8	32.3	139.3	34.4
	ROSERAY	352.9	–	–	260.5	46.6	213.9	37.4
	SECOND WHITE SPECKS	2 002.9	–	–	1 229.8	4.5	1 225.3	35.4
	SPARKY	162.6	–	–	116.6	28.8	88.2	34.4
	SPINNEY HILL	102.3	–	–	73.9	5.5	68.4	32.0
	ST. WALBURG	590.6	–	–	452.0	7.3	444.7	35.2
	UPPER SHAUNAVON	618.2	–	–	444.7	0.6	444.1	38.0
	VIKING	5 362.9	–	–	3 173.3	133.3	3 040.0	37.4
	WASECA	123.0	–	–	92.2	8.7	83.5	34.2
	TOTAL NON-ASSOCIATED	**158 942.7**			**109 616.2**	**37 718.5**	**71 897.7**	
ASSOCIATED GAS RESERVES								
ABERFELDY	SPARKY SAND	125.4	80	5	95.3	62.7	32.6	34.4
ALIDA EAST	ALIDA	833.4	45	5	356.3	160.7	195.6	45.0
ALIDA WEST	ALIDA	81.9	85	5	66.1	0.0	66.1	45.0
AVON HILL	VIKING SAND	10.6	80	5	8.1	0.0	8.1	37.4
BUFFALO COULEE	BAKKEN SAND	3.5	60	5	2.0	2.0	0.0	37.2
CANTUAR EAST	CANTUAR SAND	914.1	90	3	796.0	568.3	228.7	37.4
COSINE LAKE	LLOYDMINSTER SAND	170.9	66	5	107.2	51.5	55.7	34.4
DEE VALLEY	WASECA SAND	75.5	70	5	50.2	0.0	50.2	37.2
EPPING	SPARKY SAND	9.8	80	5	7.4	2.6	4.8	34.4
EUREKA	VIKING SAND	12.5	80	5	9.5	8.6	0.9	40.7
HOOSIER	BAKKEN SAND	83.1	90	5	54.0	14.6	39.4	37.9
LASHBURN	WASECA SAND	11.3	80	5	8.8	3.1	5.5	34.4
LONE ROCK	SPARKY SAND	2.5	80	5	1.9	0.2	1.7	34.4
MARSDEN SOUTH	SPARKY SAND (VOLUNTARY UNIT NO. 1)	93.6	50	5	44.5	22.4	22.1	34.4
NORTH HOOSIER	BAKKEN SAND	11.0	85	5	8.9	4.0	4.9	37.7
NOTTINGHAM	ALIDA	211.2	90	5	180.6	0.0	180.6	45.0
SENLAC	LLOYDMINSTER SAND	214.1	43	5	87.5	36.1	51.4	34.4
SILVERDALE	SPARKY SAND	27.2	80	5	20.7	12.4	8.3	34.4
SMILEY-DEWAR	VIKING SAND	15.7	80	5	11.9	8.3	3.6	38.3
TANGLEFLAGS	SPARKY SAND	4.7	85	5	3.8	3.0	0.8	34.4
	TOTAL ASSOCIATED	**2 892.9**			**1 922.5**	**961.5**	**961.0**	

NATURAL GAS RESERVOIR DATA

1988 PRODUCTION YEARLY TOTAL MILLION m^3	DAILY AVERAGE MILLION m^3/DAY	DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY —PER	AVERAGE CONNATE WATER CENT—	SPECIFIC GRAVITY	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
6.779	0.022	518	2.34	28.0	55.0	0.590	908	CRETACEOUS	1985	UNITY FIELD	SPARKY SAND
0.000	0.000	2 181	4.88	28.0	20.0	0.600	632	CRETACEOUS	1944		UNITY SAND
2.347	0.009	777	1.22	21.8	35.0	0.600	503	CRETACEOUS	1945		VIKING SAND
2.701	0.051	1 302	2.46	22.8	38.5	0.580	950	CRETACEOUS	1973	WHEAT VALLEY	CANTUAR SAND
6.961	0.034	2 987	4.11	36.0	30.0	0.566	229	CRETACEOUS	1982	WHITESIDE	RIBSTONE CREEK SAND (VOL UNIT)
10.567	0.053	1 036	3.66	33.0	25.0	0.572	248	CRETACEOUS	1984	WHITESIDE WEST	RIBSTONE CREEK SAND
5.457	0.021	3 960	2.22	22.8	32.0	0.578	724	CRETACEOUS	1958		VIKING SAND
1.230	0.014	129	–	–	–	–	–	MISSISSIPPIAN	–	MISCELLANEOUS	ALIDA
50.278	0.221	1 926	–	–	–	–	–	MISSISSIPPIAN	–		BAKKEN
0.903	0.039	662	–	–	–	–	–	CRETACEOUS	–		CANTUAR
62.447	0.566	8 033	–	–	–	–	–	CRETACEOUS	–		COLONY
1.474	0.016	32	–	–	–	–	–	CRETACEOUS	–		CUMMINGS
2.184	0.036	259	–	–	–	–	–	PRE-CRETACEOUS	–		DETRITAL
0.000	0.000	131	–	–	–	–	–	CRETACEOUS	–		LLOYDMINSTER
12.236	0.105	2 150	–	–	–	–	–	CRETACEOUS	–		MANNVILLE
60.637	0.282	4125	–	–	–	–	–	CRETACEOUS	–		MCLAREN
0.000	0.000	259	–	–	–	–	–	CRETACEOUS	–		MILK RIVER
3.078	0.009	294	–	–	–	–	–	CRETACEOUS	–		REX
9.552	0.034	1 554	–	–	–	–	–	CRETACEOUS	–		RIBSTONE CREEK
0.000	0.000	1 708	–	–	–	–	–	CRETACEOUS	–		ROSERAY
1.751	0.013	3 387	–	–	–	–	–	CRETACEOUS	–		SECOND WHITE SPECKS
9.248	0.048	400	–	–	–	–	–	CRETACEOUS	–		SPARKY
0.000	0.000	259	–	–	–	–	–	CRETACEOUS	–		SPINNEY HILL
2.634	0.008	518	–	–	–	–	–	CRETACEOUS	–		ST. WALBURG
0.000	0.000	0	–	–	–	–	–	JURASSIC	–		UPPER SHAUNAVON
23.637	0.200	2 067	–	–	–	–	–	CRETACEOUS	–		VIKING
5.040	0.055	478	–	–	–	–	–	CRETACEOUS	–		WASECA
3 765.163	18.760										TOTAL NON-ASSOCIATED
											ASSOCIATED GAS RESERVES
0.000	0.000	878	2.44	25.0	30.0	0.595	529	CRETACEOUS	1958	ABERFELDY	SPARKY SAND
0.000	0.000	858	5.79	18.1	20.0	0.700	1 116	MISSISSIPPIAN	1964	ALIDA EAST	ALIDA
0.000	0.000	214	3.05	14.3	31.0	0.700	1 137	MISSISSIPPIAN	1955	ALIDA WEST	ALIDA
0.000	0.000	40	2.13	25.0	30.0	0.600	678	CRETACEOUS	1959	AVON HILL	VIKING SAND
0.000	0.000	8	3.05	23.0	25.0	0.585	806	MISSISSIPPIAN	1953	BUFFALO COULEE	BAKKEN SAND
0.000	0.000	1 127	8.69	25.8	41.0	0.589	960	CRETACEOUS	1957	CANTUAR EAST	CANTUAR SAND
8.642	0.023	483	2.92	30.0	35.0	0.600	770	CRETACEOUS	1972	COSINE LAKE	LLOYDMINSTER SAND
0.000	0.000	683	1.50	30.0	30.0	0.597	460	CRETACEOUS	1967	DEE VALLEY	WASECA SAND
0.000	0.000	86	2.44	25.0	20.0	0.609	610	CRETACEOUS	1967	EPPING	SPARKY SAND
0.112	0.001	66	2.01	22.4	35.0	0.622	389	CRETACEOUS	1954	EUREKA	VIKING SAND
1.410	0.004	142	2.44	25.0	36.0	0.576	852	MISSISSIPPIAN	1972	HOOSIER	BAKKEN SAND
0.000	0.000	129	4.51	25.0	30.0	0.592	466	CRETACEOUS	1966	LASHBURN	WASECA SAND
0.000	0.000	18	2.44	25.0	30.0	0.600	560	CRETACEOUS	1947	LONE ROCK	SPARKY SAND
1.484	0.018	518	2.04	30.0	35.0	0.600	625	CRETACEOUS	1979	MARSDEN SOUTH	SPARKY SAND (VOLUNTARY UNIT NO. 1)
0.000	0.000	83	1.52	20.0	25.0	0.600	831	MISSISSIPPIAN	1960	NORTH HOOSIER	BAKKEN SAND
0.000	0.000	364	6.10	16.7	34.0	0.700	1 081	MISSISSIPPIAN	1958	NOTTINGHAM	ALIDA
10.326	0.028	1 332	1.16	30.0	25.0	0.600	767	CRETACEOUS	1960	SENLAC	LLOYDMINSTER SAND
0.000	0.000	129	3.05	25.0	30.0	0.586	579	CRETACEOUS	1985	SILVERDALE	SPARKY SAND
0.448	0.001	66	2.29	25.5	32.0	0.606	894	CRETACEOUS	1973	SMILEY-DEWAR	VIKING SAND
0.000	0.000	24	3.05	25.0	30.0	0.595	611	CRETACEOUS	1969	TANGLEFLAGS	SPARKY SAND
22.661	0.073										TOTAL ASSOCIATED

NATURAL GAS RESERVES

POOL	PRODUCING HORIZON	INITIAL GAS IN PLACE MILLION CUBIC METRES	RESERVOIR RECOVERY PER CENT	SURFACE LOSSES PER CENT	INITIAL ESTABLISHED RESERVES	CUMULATIVE PRODUCTION DEC 31/88	REMAINING RESERVES DEC 31/88	ESTIMATED HEATING VALUE MAJ/m3
					——MILLION CUBIC METRES——			
DISSOLVED GAS RESERVES								
	AREA II				1 754.1	1 123.5	630.6	
	AREA III				414.1	368.9	45.2	
	AREA IV				5 434.4	4 600.0	834.4	
	TOTAL DISSOLVED				**7 602.6**	**6 092.4**	**1 510.2**	
	PROVINCIAL TOTALS	**161 834.7**			**118 161.3**	**44 772.4**	**74 388.9**	

NATURAL GAS RESERVOIR DATA

1988 PRODUCTION YEARLY TOTAL MILLION m^3	DAILY AVERAGE MILLION m^3/DAY	DEVELOPED AREA HECTARES	NET PAY METRES	AVERAGE POROSITY —PER	AVERAGE CONNATE WATER CENT—	SPECIFIC GRAVITY	PRODUCING DEPTH METRES	SYSTEM	DISCOVERY YEAR	POOL	PRODUCING HORIZON
											DISSOLVED GAS RESERVES
125.995	0.345										AREA II
5.696	0.016										AREA III
170.086	0.465										AREA IV
301.777	**0.826**										**TOTAL DISSOLVED**
4 089.381	**19.859**										**PROVINCIAL TOTALS**

OIL AND GAS UNITS

AND ENHANCED

RECOVERY PROJECTS

OIL AND GAS UNITS – ENHANCED RECOVERY PROJECTS

UNIT NAME	OPERATOR	PRODUCING ZONE	UNIT EFFECTIVE DATE	LATEST BOUNDARY REVISION	ENHANCED RECOVERY PROJECTS
AREA I					
ABERFELDY UNIT	HUSKY	SPARKY	12-1-62	5-1-66	WATERFLOOD (SUSPENDED)
					IN-SITU WET COMB. (SUSP.)
					STEAMFLOOD (SUSPENDED)
BIG GULLY VOLUNTARY UNIT NO. 1	HUSKY	WASECA & MCLAREN	10-1-70	1-1-71	WATERFLOOD (SUSPENDED)
GOLDEN LAKE VOLUNTARY UNIT	HUSKY	SPARKY & WASECA	1-1-71	11-1-71	WATERFLOOD (SUSPENDED)
GULLY LAKE WASECA VOLUNTARY UNIT NO. 1	HUSKY	WASECA	8-1-71	–	WATERFLOOD
LASHBURN WASECA VOLUNTARY UNIT	HUSKY	WASECA	4-1-68	6-1-71	WATERFLOOD (SUSPENDED)
MARSDEN SOUTH SPARKY SAND VOLUNTARY UNIT NO. 1	SASKOIL	SPARKY	12-1-85	–	WATERFLOOD
NORTH DULWICH SPARKY VOLUNTARY UNIT	HUSKY	SPARKY	10-1-70	–	WATERFLOOD (SUSPENDED)
NORTHMINSTER SPARKY VOLUNTARY UNIT	HUSKY	SPARKY	3-1-70	9-1-70	WATERFLOOD
SOUTH ABERFELDY SPARKY VOLUNTARY UNIT	HUSKY	SPARKY	6-1-69	5-1-70	WATERFLOOD (SUSPENDED)
SOUTH EPPING UNIT NO. 1	ESSO RESOURCES	SPARKY & G.P.	2-1-66	9-1-67	WATERFLOOD
SOUTH WEST EPPING SPARKY VOLUNTARY UNIT NO. 1	ESSO RESOURCES	SPARKY	1-1-72	7-1-73	WATERFLOOD
TANGLEFLAGS VOLUNTARY UNIT NO. 2	AMOCO	LLOYDMINSTER	3-1-81	–	WATERFLOOD
TANGLEFLAGS VOLUNTARY UNIT NO. 3	MOBIL	G.P., MCLAREN & LLOYDMINSTER	2-1-81	–	–
AREA II					
AVON HILL VIKING VOLUNTARY UNIT	ANNUITY	VIKING	8-1-85	–	WATERFLOOD
BAYHURST VIKING VOLUNTARY GAS UNIT	TRANSGAS	VIKING	11-1-66	–	GAS STORAGE
BROCK VIKING SAND GAS UNIT	HUSKY	VIKING	3-1-54	–	–
CACTUS LAKE BAKKEN VOLUNTARY UNIT NO. 1	CN EXPLORATION	BAKKEN	5-1-88	–	WATERFLOOD
CACTUS LAKE BAKKEN VOLUNTARY UNIT NO. 2	PETRO-CANADA	BAKKEN	6-1-88	–	WATERFLOOD
COLEVILLE-SMILEY VIKING SAND GAS UNIT	ESSO RESOURCES	VIKING	7-1-55	4-1-72	–
COLEVILLE SOUTH BAKKEN SAND VOLUNTARY UNIT	ESSO RESOURCES	BAKKEN	3-1-88	–	WATERFLOOD
COURT BAKKEN SAND VOLUNTARY UNIT NO. 1	SASKOIL	BAKKEN	5-1-88	–	WATERFLOOD
DODSLAND VIKING GAS VOLUNTARY UNIT	AMOCO	VIKING	11-1-67	1-1-70	–
EAGLE LAKE VIKING VOLUNTARY UNIT	ESSO RESOURCES	VIKING	10-1-66	–	WATERFLOOD
EAST DODSLAND VIKING VOLUNTARY UNIT	PAGE	VIKING	9-1-85	–	WATERFLOOD
GLENEATH UNIT	MARK	VIKING	6-1-66	10-1-67	WATERFLOOD
GLENEATH SOUTH VIKING VOLUNTARY UNIT	ULTRAMAR	VIKING	9-1-85	–	WATERFLOOD
GLIDDEN VIKING GAS VOLUNTARY UNIT NO. 1	WESTAR	VIKING	9-1-72	–	–
HOOSIER BAKKEN SAND VOL. UNIT NO. 1	AMOCO	BAKKEN	3-1-81	–	WATERFLOOD
HOOSIER VIKING SAND GAS UNIT	ESSO RESOURCES	VIKING	8-1-57	–	–
KIYIU LAKE VIKING VOLUNTARY UNIT	ANNUITY	VIKING	12-1-85	–	–
KIYIU LAKE VIKING VOLUNTARY UNIT NO. 2	SUNCOR	VIKING	1-1-88	–	WATERFLOOD
LUCKY HILLS VIKING SAND VOLUNTARY GAS UNIT	ULTRAMAR	VIKING	6-1-71	–	–

OIL AND GAS UNITS – ENHANCED RECOVERY PROJECTS

WATER SOURCE	INJECTION PATTERN	ACTIVE WELLS 12/88 PROD.	INJ.	DATE OF FIRST INJECTION	INJECTION RATE, 12/88 m3/DAY	UNIT NAME
						AREA I
MANNVILLE	INV. 9-SPOT & 5-SPOT	129	–	05-64	–	ABERFELDY UNIT
GLACIAL DRIFT	INV. 9-SPOT & 5-SPOT	–	–	07-69	–	
SURFACE WATER	INV. 9-SPOT	–	–	02-81	–	
DINA	5-SPOT	1 18	– –	10-70	– –	BIG GULLY VOLUNTARY UNIT NO. 1
DINA	MOD. 9-SPOT	60	–	04-71	–	GOLDEN LAKE VOLUNTARY UNIT
DINA	INV. & MOD. 9-SPOT	24	2	07-71	7	GULLY LAKE WASECA VOLUNTARY UNIT NO. 1
DINA	5-SPOT	41	–	–	–	LASHBURN WASECA VOLUNTARY UNIT
DINA	INV. 9-SPOT	39	13	12-85	983	MARSDEN SOUTH SPARKY SAND VOLUNTARY UNIT NO. 1
GLACIAL DRIFT	–	1	–	10-70	–	NORTH DULWICH SPARKY VOLUNTARY UNIT
DINA	5-SPOT	25	2	10-70	183	NORTHMINSTER SPARKY VOLUNTARY UNIT
DINA	5-SPOT	52	–	09-69	–	SOUTH ABERFELDY SPARKY VOLUNTARY UNIT
MANNVILLE	INV. 9-SPOT	53	21	08-66	522	SOUTH EPPING UNIT NO. 1
DINA	INV. 9-SPOT	32	13	03-72	385	SOUTH WEST EPPING SPARKY VOLUNTARY UNIT NO. 1
SURFACE WATER	INV. 9-SPOT	18	5	–	272	TANGLEFLAGS VOLUNTARY UNIT NO. 2
–	–	43	–	–	–	TANGLEFLAGS VOLUNTARY UNIT NO. 3
						AREA II
DEADWOOD	INV. 9-SPOT	58	21	12-85	364	AVON HILL VIKING VOLUNTARY UNIT
–	–	–	–	–	–	BAYHURST VIKING VOLUNTARY GAS UNIT
–	–	2	–	–	–	BROCK VIKING SAND GAS UNIT
RIBSTONE CREEK	INV. 9-SPOT	12	4	06-88	265	CACTUS LAKE VOLUNTARY UNIT NO. 1
RIBSTONE CREEK	INV. 9-SPOT	63	21	06-88	970	CACTUS LAKE VOLUNTARY UNIT NO. 2
–	–	32	–	–	–	COLEVILLE-SMILEY VIKING SAND GAS UNIT
BELLY RIVER	PERIPHERAL	16	1	01-88	65	COLEVILLE SOUTH BAKKEN SAND VOLUNTARY UNIT
MANNVILLE	INV. 9-SPOT	23	6	08-88	1 105	COURT BAKKEN SAND VOLUNTARY UNIT NO. 1
–	–	12	–	–	–	DODSLAND VIKING GAS VOLUNTARY UNIT
BELLY RIVER	INV. 9-SPOT	162	39	01-67	262	EAGLE LAKE VIKING VOLUNTARY UNIT
DEADWOOD	5-SPOT	223	167	10-85	1 048	EAST DODSLAND VIKING VOLUNTARY UNIT
BELLY RIVER	INV. 9-SPOT	125	33	10-66	464	GLENEATH UNIT
BELLY RIVER	INV. 9-SPOT	7	2	07-85	4	GLENEATH SOUTH VIKING VOLUNTARY UNIT
–	–	0	–	–	–	GLIDDEN VIKING GAS VOLUNTARY UNIT NO. 1
PRODUCED WATER	–	7	2	01-75	108	HOOSIER BAKKEN SAND VOL. UNIT NO. 1
–	–	15	–	–	–	HOOSIER VIKING SAND GAS UNIT
–	–	48	–	–	–	KIYIU LAKE VIKING VOLUNTARY UNIT
DUPEROW	INV. 9-SPOT	33	11	03-86	10	KIYIU LAKE VIKING VOLUNTARY UNIT NO. 2
–	–	7	–	–	–	LUCKY HILLS VIKING SAND VOLUNTARY GAS UNIT

OIL AND GAS UNITS – ENHANCED RECOVERY PROJECTS

UNIT NAME	OPERATOR	PRODUCING ZONE	UNIT EFFECTIVE DATE	LATEST BOUNDARY REVISION	ENHANCED RECOVERY PROJECTS
NORTH DODSLAND VIKING VOLUNTARY UNIT	ANNUITY	VIKING	6-1-85	–	WATERFLOOD
NORTH DODSLAND VIKING VOLUNTARY UNIT NO. 2	BATTLE CREEK	VIKING	1-1-89	–	–
NORTH EUREKA UNIT	ESSO RESOURCES	VIKING	9-1-65	12-1-71	WATERFLOOD
NORTH HOOSIER BAKKEN SAND VOLUNTARY UNIT	AMOCO	BAKKEN	7-1-70	8-1-73	WATERFLOOD
NORTH HOOSIER BASAL BLAIRMORE VOLUNTARY UNIT	MARK	MANNVILLE	1-1-69	5-1-80	WATERFLOOD
PLATO VIKING VOLUNTARY UNIT NO. 1	TRI LINK	VIKING	4-1-73	–	WATERFLOOD
SOUTH EUREKA UNIT	ULTRAMAR	VIKING	4-1-65	9-1-71	WATERFLOOD
TOTNES VIKING GAS VOLUNTARY UNIT NO. 1	ICG RESOURCES	VIKING	1-1-71	–	–
WEST BAYHURST VIKING GAS VOLUNTARY UNIT	ALTEX	VIKING	2-1-72	–	–
WHITESIDE VIKING VOLUNTARY UNIT	ANNUITY	VIKING	9-1-85	–	WATERFLOOD
WHITESIDE VICTORIA VOLUNTARY GAS UNIT	ULTRAMAR	VICTORIA	1-1-68	–	–
AREA III					
ANTELOPE LAKE UPPER SHAUNAVON VOLUNTARY UNIT	UNIVERSAL	UPPER SHAUNAVON	3-1-75	–	WATERFLOOD
BATTRUM UNIT NO. 1	MOBIL	ROSERAY	10-1-64	6-1-69	WATERFLOOD IN-SITU WET COMBUSTION
BATTRUM UNIT NO. 2	MOBIL	ROSERAY	10-1-64	–	IN-SITU WET COMBUSTION
BATTRUM VOLUNTARY UNIT NO. 3	MOBIL	ROSERAY	6-1-66	–	WATERFLOOD IN-SITU WET COMBUSTION
BATTRUM UNIT NO. 4	SCEPTRE	ROSERAY	6-1-66	–	WATERFLOOD
BEVERLEY UNIT NO. 1	MOBIL	UPPER & LOWER ROSERAY	5-1-66	–	WATERFLOOD
BEVERLEY VOLUNTARY UNIT NO. 2	MOBIL	ROSERAY	6-1-88	–	WATERFLOOD
BEVERLEY CANTUAR VOLUNTARY UNIT NO. 1	MOBIL	CANTUAR	6-1-88	–	WATERFLOOD
BEVERLEY NORTH CANTUAR VOLUNTARY UNIT NO. 1	MOBIL	CANTUAR	6-1-88	–	WATERFLOOD
BONE CREEK UNIT	SASKOIL	UPPER SHAUNAVON	6-1-58	7-1-60	WATERFLOOD
BUTTE VOLUNTARY UNIT	AMOCO	UPPER SHAUNAVON	1-1-71	2-1-72	WATERFLOOD
CANTUAR UNIT	MOBIL	CANTUAR & LOWER ROSERAY	10-1-59	–	WATERFLOOD
COVINGTON UNIT NO. 1	CAN. NORTHWEST	UPPER SHAUNAVON	7-1-69	–	WATERFLOOD
DELTA UNIT NO. 1	MOBIL	UPPER SHAUNAVON	4-1-66	6-1-69	WATERFLOOD
DELTA UNIT NO. 2	MOBIL	UPPER SHAUNAVON	8-1-69	–	WATERFLOOD
DELTA VOLUNTARY UNIT NO. 3	MOBIL	UPPER SHAUNAVON	12-1-86	–	WATERFLOOD
DOLLARD UNIT	ENCOR ENERGY	UPPER SHAUNAVON	9-1-55	7-1-72	WATERFLOOD
EAST BEVERLEY VOLUNTARY GAS UNIT NO. 1	MOBIL	CANTUAR	8-1-78	–	–
EAST CANTUAR GAS UNIT	AMOCO	CANTUAR & ROSERAY	3-1-75	–	GAS STORAGE
EAST CANTUAR UNIT NO. 1	MOBIL	CANTUAR & ROSERAY	3-1-75	–	WATERFLOOD (CANTUAR & ROSERAY)

OIL AND GAS UNITS – ENHANCED RECOVERY PROJECTS

WATER SOURCE	INJECTION PATTERN	ACTIVE WELLS 12/88 PROD.	ACTIVE WELLS 12/88 INJ.	DATE OF FIRST INJECTION	INJECTION RATE, 12/88 m3/DAY	UNIT NAME
DEADWOOD	INV. 9-SPOT	71	30	12-65	308	NORTH DODSLAND VIKING VOLUNTARY UNIT
–	–	19	–	–	–	NORTH DODSLAND VIKING VOLUNTARY UNIT NO. 2
BELLY RIVER	INV. 9-SPOT	38	8	03-63	293	NORTH EUREKA UNIT
RIBSTONE CREEK	LINE DRIVE	16	3	08-70	826	NORTH HOOSIER BAKKEN SAND VOLUNTARY UNIT
LEA PARK	–	19	7	12-66	563	NORTH HOOSIER BASAL BLAIRMORE VOLUNTARY UNIT
BELLY RIVER	INV. 9-SPOT	34	1	01-73	22	PLATO VIKING VOLUNTARY UNIT NO. 1
RIBSTONE CREEK & BELLY RIVER	INV. 9-SPOT	58	19	09-73	351	SOUTH EUREKA UNIT
–	–	2	–	–	–	TOTNES VIKING GAS VOLUNTARY UNIT NO. 1
–	–	1	–	–	–	WEST BAYHURST VIKING GAS VOLUNTARY UNIT
DUPEROW	INV. 9-SPOT	16	8	05-65	88	WHITESIDE VIKING VOLUNTARY UNIT
–	–	2	–	–	–	WHITESIDE VICTORIA VOLUNTARY GAS UNIT
						AREA III
ROSERAY	–	3	1	10-76	21	ANTELOPE LAKE UPPER SHAUNAVON VOLUNTARY UNIT
BELLY RIVER	PERIPHERAL	77	6	03-62	1 887	BATTRUM UNIT NO. 1
–	–		7	10-68		
–	–	23	3	11-65	450	BATTRUM UNIT NO. 2
MANNVILLE	INV. 9-SPOT	22	2	12-66	333	BATTRUM UNIT NO. 3
–	–		3	06-67		
MANNVILLE	INV. 9-SPOT	15	6	08-66	947	BATTRUM UNIT NO. 4
MANNVILLE	PERIPHERAL	13	3	01-66	675	BEVERLEY UNIT NO. 1
MANNVILLE	PERIPHERAL	8	2	06-88	410	BEVERLEY VOLUNTARY UNIT NO. 2
MANNVILLE	INV. 9-SPOT	30	6	06-88	215	BEVERLEY CANTUAR VOLUNTARY UNIT NO. 1
MANNVILLE	INV. 9-SPOT	22	6	06-88	315	BEVERLEY NORTH CANTUAR VOLUNTARY UNIT NO. 1
BELLY RIVER	PERIPHERAL & INV. 9-SPOT	30	14	05-60	1 631	BONE CREEK UNIT
BELLY RIVER	INV. 9-SPOT	37	11	11-70	403	BUTTE VOLUNTARY UNIT
BELLY RIVER	PERIPHERAL	60	25	08-60	4 496	CANTUAR UNIT
		17	–	–	–	
ROSERAY SAND	–	4	1	11-68	142	COVINGTON UNIT NO. 1
BELLY RIVER	INV. 9-SPOT	28	10	12-65	1 403	DELTA UNIT NO. 1
BELLY RIVER	INV. 9-SPOT	10	3	10-69	323	DELTA UNIT NO. 2
BELLY RIVER	PERIPHERAL	3	1	07-67	42	DELTA VOLUNTARY UNIT NO. 3
VIKING, BELLY RIVER & MANNVILLE	SEMI-PERIPHERAL	39	17	03-58	2 600	DOLLARD UNIT
–	–	2	–	–	–	EAST BEVERLEY VOLUNTARY GAS UNIT NO. 1
–	–	–	–	–	–	EAST CANTUAR GAS UNIT
MANNVILLE	–	5	2	09-75	209	EAST CANTUAR UNIT NO. 1
		5	3	03-69	206	

OIL AND GAS UNITS – ENHANCED RECOVERY PROJECTS

UNIT NAME	OPERATOR	PRODUCING ZONE	UNIT EFFECTIVE DATE	LATEST BOUNDARY REVISION	ENHANCED RECOVERY PROJECTS
EAST CANTUAR UNIT NO. 2	AMOCO	ROSERAY & CANTUAR	3-1-75	–	WATERFLOOD (ROSERAY)
EAST DOLLARD VOLUNTARY UNIT	AMERICAN EAGLE	UPPER SHAUNAVON	10-1-70	–	WATERFLOOD
FOSTERTON MAIN UNIT	MOBIL	ROSERAY	7-1-58	–	WATERFLOOD
FOSTERTON N.W. UNIT	MOBIL	ROSERAY	7-1-58	9-1-70	WATERFLOOD (SUSPENDED) IN-SITU WET COMBUSTION
GULL LAKE CANTUAR VOLUNTARY UNIT NO. 1	AMOCO	CANTUAR	5-1-72	–	WATERFLOOD
GULL LAKE NORTH SHAUNAVON POOL UNIT	MOBIL	UPPER SHAUNAVON	10-1-58	–	WATERFLOOD
GULL LAKE SOUTH VOLUNTARY UNIT NO. 1	MOBIL	UPPER SHAUNAVON	7-1-86	–	WATERFLOOD
GULL LAKE UPPER SHAUNAVON VOLUNTARY UNIT NO. 1	AMOCO	UPPER SHAUNAVON	5-1-72	–	WATERFLOOD
HATTON GAS UNIT	TRANSGAS	MEDICINE HAT	5-1-59	–	–
HAZLET UNIT	CENERGY	ROSERAY	8-1-66	–	WATERFLOOD
ILLERBRUN VOLUNTARY UNIT	AMOCO	UPPER SHAUNAVON	11-1-66	5-1-67	WATERFLOOD
INSTOW UNIT	ENCOR ENERGY	UPPER SHAUNAVON	10-1-59	–	WATERFLOOD
INSTOW SOUTH UPPER SHAUNAVON VOLUNTARY UNIT	UNIVERSAL	UPPER SHAUNAVON	5-1-85	–	WATERFLOOD
JOHNSON UNIT	AMOCO	BASAL CANTUAR UPPER SHAUNAVON	1-1-63	–	WATERFLOOD (BASAL CANTUAR)
LEITCHVILLE SHAUNAVON VOLUNTARY UNIT	OMV CANADA	SHAUNAVON	1-1-68	–	WATERFLOOD
NORTH PREMIER UNIT NO. 1	MOBIL	ROSERAY & UPPER SHAUNAVON	10-1-64	–	WATERFLOOD (ROSERAY)
NORTH PREMIER UNIT NO. 2	MOBIL	PREMIER SAND	7-1-66	–	WATERFLOOD
NORTH PREMIER VOLUNTARY UNIT NO. 4	MOBIL	ROSERAY & UPPER SHAUNAVON	9-1-80	–	WATERFLOOD
NORTH PREMIER UPPER SHAUNAVON VOLUNTARY UNIT	OMV CANADA	UPPER SHAUNAVON	11-1-72	–	WATERFLOOD
NORTH RAPDANUPPER SHAUNAVON VOLUNTARY UNIT	ESSO RESOURCES	UPPER SHAUNAVON	2-1-68	5-1-68	WATERFLOOD
PENNANT UPPER SHAUNAVON VOLUNTARY UNIT	CAN. NORTHWEST	UPPER SHAUNAVON	6-1-88	–	WATERFLOOD
RAPDAN UNIT	ENCOR ENERGY	UPPER SHAUNAVON	10-1-57	7-1-65	WATERFLOOD
RAPDAN UPPER SHAUNAVON VOLUNTARY UNIT NO. 2	SASKOIL	UPPER SHAUNAVON	4-1-74	–	WATERFLOOD
SOUTHWEST SUCCESS VOLUNTARY UNIT	ATCOR	ROSERAY & CANTUAR	4-1-83	–	–
SUCCESS UNIT	MOBIL	ROSERAY & FOSTERTON	12-1-57	–	WATERFLOOD
SUCCESS ALPHA UNIT	MOBIL	ROSERAY	7-1-60	–	WATERFLOOD
SUCCESS MAIN UNIT	MOBIL	CANTUAR, ROSERAY & FOSTERTON	9-1-62	–	WATERFLOOD (ROSERAY)
SUCCESS NORTH ROSERAY VOLUNTARY UNIT	TRI LINK	ROSERAY	4-1-84	–	WATERFLOOD
SUFFIELD UNIT NO. 1	MOBIL	ROSERAY	7-1-66	4-1-72	WATERFLOOD
SUFFIELD UNIT NO. 2	MOBIL	UPPER SHAUNAVON	9-1-70	–	WATERFLOOD
SUFFIELD UNIT NO. 3	MOBIL	ROSERAY & UPPER SHAUNAVON	6-1-71	4-1-72	WATERFLOOD
VERLO ROSERAY SAND UNIT	MOBIL	ROSERAY	9-1-70	10-1-7	WATERFLOOD
WEST FOSTERTON VOLUNTARY UNIT	ESSO RESOURCES	ROSERAY	3-1-67	–	WATERFLOOD

OIL AND GAS UNITS – ENHANCED RECOVERY PROJECTS

WATER SOURCE	INJECTION PATTERN	ACTIVE WELLS 12/88 PROD.	INJ.	DATE OF FIRST INJECTION	INJECTION RATE, 12/88 m3/DAY	UNIT NAME
MANNVILLE	–	3	1	01-76	27	EAST CANTUAR UNIT NO. 2
		1	–	–	–	
BELLY RIVER	PERIPHERAL	9	1	10-70	458	EAST DOLLARD VOLUNTARY UNIT
BELLY RIVER	LINE DRIVE	18	14	06-56	4 704	FOSTERTON MAIN UNIT
BELLY RIVER	–	–	–	03-57	–	FOSTERTON N.W. UNIT
–	–	3	2	03-70	101	
BELLY RIVER	PERIPHERAL & MOD. 9-SPOT	8	4	06-70	231	GULL LAKE CANTUAR VOLUNTARY UNIT NO. 1
SURFACE WATER	–	23	3	06-56	1 225	GULL LAKE NORTH SHAUNAVON POOL UNIT
ROSERAY SAND	–	6	1	06-68	68	GULL LAKE SOUTH VOLUNTARY UNIT NO. 1
BELLY RIVER	–	4	0	05-72	0	GULL LAKE UPPER SHAUNAVON VOLUNTARY UNIT NO. 1
–	–	186	–	–	–	HATTON GAS UNIT
MANNVILLE	PERIPHERAL	3	2	07-70	1 073	HAZLET UNIT
BELLY RIVER	–	3	3	04-66	502	ILLERBRUN VOLUNTARY UNIT
BELLY RIVER & RAVENSCRAG	PERIPHERAL	51	21	12-57	4 237	INSTOW UNIT
BELLY RIVER	–	9	3	12-65	131	INSTOW SOUTH UPPER SHAUNAVON VOLUNTARY UNIT
SURFACE WATER	–	2	1	03-63	58	JOHNSTON UNIT
–	–	1	–	–	–	
BELLY RIVER	–	6	3	07-64	12	LEITCHVILLE SHAUNAVON VOLUNTARY UNIT
MANNVILLE	–	5	3	07-64	1 317	NORTH PREMIER UNIT NO. 1
MANNVILLE	–	1	1	06-67	90	NORTH PREMIER UNIT NO. 2
MANNVILLE	PERIPHERAL	13	5	02-65	2 789	NORTH PREMIER VOLUNTARY UNIT NO. 4
	–	14	4	12-80	141	
MANNVILLE	–	7	2	02-73	24	NORTH PREMIER UPPER SHAUNAVON VOLUNTARY UNIT
BELLY RIVER	–	7	1	07-68	5	NORTH RAPDAN UPPER SHAUNAVON VOLUNTARY UNIT
BELLY RIVER	INV. 9-SPOT	5	2	06-88	57	PENNANT UPPER SHAUNAVON VOLUNTARY UNIT
BELLY RIVER	PERIPHERAL	54	31	11-62	1 321	RAPDAN UNIT
BELLY RIVER	PARTIAL 5-SPOT	5	1	04-74	33	RAPDAN UPPER SHAUNAVON VOLUNTARY UNIT NO. 2
–	–	11	1	10-80	66	SOUTHWEST SUCCESS VOLUNTARY UNIT
		1	–	–	–	
MANNVILLE	PERIPHERAL	24	4	06-58	2 556	SUCCESS UNIT
MANNVILLE	–	5	1	09-80	488	SUCCESS ALPHA UNIT
MANNVILLE	PERIPHERAL	13	4	09-58	1 267	SUCCESS MAIN UNIT
MANNVILLE	PERIPHERAL	16	2	06-82	532	SUCCESS NORTH ROSERAY VOLUNTARY UNIT
BELLY RIVER	PERIPHERAL	9	2	05-66	576	SUFFIELD UNIT NO. 1
BELLY RIVER	–	13	3	07-70	474	SUFFIELD UNIT NO. 2
BELLY RIVER	PERIPHERAL	9	4	06-70	842	SUFFIELD UNIT NO. 3
		2	3		324	
MANNVILLE	–	14	6	06-65	5 192	VERLO ROSERAY SAND UNIT
BELLY RIVER	–	5	2	04-67	328	WEST FOSTERTON VOLUNTARY UNIT

OIL AND GAS UNITS – ENHANCED RECOVERY PROJECTS

UNIT NAME	OPERATOR	PRODUCING ZONE	UNIT EFFECTIVE DATE	LATEST BOUNDARY REVISION	ENHANCED RECOVERY PROJECTS
AREA IV					
ALAMEDA CENTRAL UNIT	GULF	MIDALE	12-1-62	6-1-69	WATERFLOOD
ALAMEDA EAST UNIT	AMOCO	MIDALE	8-1-62	9-1-65	WATERFLOOD
ALAMEDA WEST MIDALE VOLUNTARY UNIT NO. 1	ARGYLL	MIDALE	12-1-84		WATERFLOOD
ALIDA UNIT	MOBIL	ALIDA	12-1-57	–	–
ANTLER VOLUNTARY UNIT NO. 1	SADELLE	MIDALE	11-1-71	–	WATERFLOOD
BENSON UNIT	SHELL	MIDALE	2-1-66	9-1-67	WATERFLOOD
BENSON MIDALE BEDS VOLUNTARY UNIT NO. 1	AMOCO	MIDALE	11-1-67	6-1-68	WATERFLOOD
CANTAL FROBISHER-ALIDA BEDS VOLUNTARY UNIT NO. 1	SASKOIL	FROBISHER-ALIDA	1-1-72	–	–
CARNDUFF SOUTH MIDALE VOLUNTARY UNIT NO. 1	SCURRY-RAINBOW	MIDALE	1-1-85	–	WATERFLOOD
CARNDUFF VOLUNTARY UNIT NO. 1	SCEPTRE	MIDALE	12-1-70	–	WATERFLOOD
CULLEN UNIT	NORCEN	MIDALE	10-1-66	5-1-68	–
DOUGLASTON-FROBISHER BEDS UNIT	AMOCO	FROBISHER	6-1-64	–	–
DOUGLASTON-MIDALE BEDS UNIT	AMOCO	MIDALE	6-1-64	10-1-67	WATERFLOOD
EAST CARNDUFF UNIT	GULF	MIDALE	5-1-62	11-1-65	WATERFLOOD
ELMORE FROBISHER BEDS VOLUNTARY UNIT NO. 1	ESSO RESOURCES	FROBISHER	12-1-69	–	WATERFLOOD
FLAT LAKE RATCLIFFE VOLUNTARY UNIT NO. 1	PANCANADIAN	RATCLIFFE	8-1-68	9-1-69	WATERFLOOD
FLETWODE ALIDA VOLUNTARY UNIT	CANOXY	ALIDA	10-1-66	–	–
FREDA LAKE RATCLIFFE VOLUNTARY UNIT NO. 1	SILVER BAY	RATCLIFFE	6-1-68	–	WATERFLOOD
GAINSBOROUGH FROBISHER-ALIDA VOLUNTARY UNIT	BERRY	FROBISHER-ALIDA	11-1-72	–	WATERFLOOD (FROBISHER)
GLEN EWEN UNIT	SCEPTRE	MIDALE	4-1-63	–	WATERFLOOD
HASTINGS FROBISHER UNIT	SASKOIL	FROBISHER	7-1-71	–	WATERFLOOD
HASTINGS FROBISHER BEDS VOLUNTARY UNIT NO. 1	GULF	FROBISHER	1-1-70	–	WATERFLOOD
HASTINGS FROBISHER BEDS VOLUNTARY UNIT NO. 2	ESSO RESOURCES	FROBISHER	10-1-70	–	WATERFLOOD
HUMMINGBIRD BAKKEN VOLUNTARY UNIT NO. 1	AMOCO	BAKKEN	6-1-68	–	–
HUMMINGBIRD BIRDBEAR VOLUNTARY UNIT NO. 1	AMOCO	BIRDBEAR	12-1-66	–	–
HUMMINGBIRD RATCLIFFE VOLUNTARY UNIT NO. 1	AMOCO	RATCLIFFE	12-1-68	–	WATERFLOOD
HUNTOON MIDALE BEDS VOLUNTARY UNIT NO. 1	ESSO RESOURCES	MIDALE	2-1-74	–	WATERFLOOD
HUNTOON MIDALE BEDS VOLUNTARY UNIT NO. 2	OMEGA	MIDALE	12-1-87	–	WATERFLOOD
INGOLDSBY MISSION CANYON VOLUNTARY UNIT	ESSO RESOURCES	ALIDA	9-1-66	–	–
KENOSEE TILSTON BEDS VOLUNTARY UNIT	ENCOR ENERGY	TILSTON	9-1-69	–	–
KISBEY UPPER HASTINGS VOLUNTARY UNIT NO. 1	DAG RESOURCES	UPPER HASTINGS	4-1-74	–	–
LAKE ALMA VOLUNTARY UNIT	PANCANADIAN	RATCLIFFE	4-1-69	–	WATERFLOOD
LAMPMAN UNIT	GULF	MIDALE	3-1-64	10-1-67	WATERFLOOD
LOST HORSE HILL FROBISHER-ALIDA BEDS VOL. UNIT NO. 1	ESSO RESOURCES	FROBISHER-ALIDA	1-1-71	–	–
MIDALE UNIT	SHELL	MIDALE	8-1-62	9-1-67	WATERFLOOD
MIDALE SOUTH VOLUNTARY UNIT NO. 1	COMAPLEX	MIDALE	7-1-87	–	WATERFLOOD

OIL AND GAS UNITS – ENHANCED RECOVERY PROJECTS

WATER SOURCE	INJECTION PATTERN	ACTIVE WELLS 12/88 PROD.	INJ.	DATE OF FIRST INJECTION	INJECTION RATE, 12/88 m3/DAY	UNIT NAME
						AREA IV
MANNVILLE	INV. 9-SPOT	14	5	03-80	104	ALAMEDA CENTRAL UNIT
MANNVILLE	INV. 9-SPOT	30	19	12-82	408	ALAMEDA EAST UNIT
MANNVILLE	PERIPHERAL	4	4	12-84	45	ALAMEDA WEST MIDALE VOLUNTARY UNIT NO. 1
–	–	41	–	–	–	ALIDA UNIT
MANNVILLE	–	2	1	11-88	15	ANTLER VOLUNTARY UNIT NO. 1
MANNVILLE	INV. 9-SPOT	48	14	11-84	249	BENSON UNIT
MANNVILLE	INV. 9-SPOT	14	5	11-87	149	BENSON MIDALE BEDS VOLUNTARY UNIT NO. 1
–	–	3	–	–	–	CANTAL FROBISHER-ALIDA BEDS VOLUNTARY UNIT NO. 1
PRODUCED WATER	INV. 9-SPOT	15	4	08-85	111	CARNDUFF SOUTH MIDALE VOLUNTARY UNIT
RAVENSCRAG	–	6	2	05-71	32	CARNDUFF VOLUNTARY UNIT NO. 1
–	–	5	–	–	–	CULLEN UNIT
–	–	2	–	–	–	DOUGLASTON-FROBISHER BEDS UNIT
MANNVILLE	LINE DRIVE	11	9	08-84	288	DOUGLASTON-MIDALE BEDS UNIT
MANNVILLE	INV. 9-SPOT	106	18	07-82	1 447	EAST CARNDUFF UNIT
MANNVILLE	INV. 9-SPOT	25	2	11-70	166	ELMORE FROBISHER BEDS VOLUNTARY UNIT NO. 1
MANNVILLE	INV. 9-SPOT	29	8	10-88	530	FLAT LAKE RATCLIFFE VOLUNTARY UNIT NO. 1
–	–	4	–	–	–	FLETWODE ALIDA VOLUNTARY UNIT
MANNVILLE	PERIPHERAL	55	8	08-88	368	FREDA LAKE RATCLIFFE VOLUNTARY UNIT NO. 1
PRODUCED WATER	–	8	1	09-73	97	GAINSBOROUGH FROBISHER-ALIDA VOLUNTARY UNIT
MANNVILLE	INV. 9-SPOT	33	2	10-83	171	GLEN EWEN UNIT
MANNVILLE	INV. 9-SPOT	10	1	10-87	134	HASTINGS FROBISHER UNIT
MANNVILLE	PERIPHERAL	30	5	11-88	304	HASTINGS FROBISHER BEDS VOLUNTARY UNIT NO. 1
MANNVILLE	INV. 9-SPOT & PERIPHERAL	20	3	11-88	245	HASTINGS FROBISHER BEDS VOLUNTARY UNIT NO. 2
–	–	5	–	–	–	HUMMINGBIRD BAKKEN VOLUNTARY UNIT NO. 1
–	–	3	–	–	–	HUMMINGBIRD BIRDBEAR VOLUNTARY UNIT NO. 1
MANNVILLE	–	5	5	12-87	277	HUMMINGBIRD RATCLIFFE VOLUNTARY UNIT NO. 1
PRODUCED WATER	–	18	5	09-74	41	HUNTOON MIDALE BEDS VOLUNTARY UNIT NO. 1
MANNVILLE	INV. 9-SPOT	4	1	12-87	11	HUNTOON MIDALE BEDS VOLUNTARY UNIT NO. 2
–	–	38	–	–	–	INGOLDSBY MISSION CANYON VOLUNTARY UNIT
–	–	27	–	–	–	KENOSEE TILSTON BEDS VOLUNTARY UNIT
–	–	11	–	–	–	KISBEY UPPER HASTINGS VOLUNTARY UNIT NO. 1
MANNVILLE	–	6	4	09-70	362	LAKE ALMA VOLUNTARY UNIT
MANNVILLE	INV. 9-SPOT	9	3	04-84	74	LAMPMAN UNIT
–	–	32	–	–	–	LOST HORSE HILL FROBISHER-ALIDA BEDS VOL. UNIT NO. 1
MANNVILLE	INV. 9-SPOT	333	78	08-80	5 729	MIDALE UNIT
MANNVILLE	PERIPHERAL	6	0	09-87	0	MIDALE SOUTH VOLUNTARY UNIT NO. 1

OIL AND GAS UNITS – ENHANCED RECOVERY PROJECTS

UNIT NAME	OPERATOR	PRODUCING ZONE	UNIT EFFECTIVE DATE	LATEST BOUNDARY REVISION	ENHANCED RECOVERY PROJECTS
NORTH ALAMEDA UNIT	GULF	MIDALE	5-1-63	–	WATERFLOOD
NORTH CANTAL UNIT	ESSO RESOURCES	ALIDA	1-1-66	4-1-69	–
NORTH CENTRAL WILLMAR VOLUNTARY UNIT	ENCOR ENERGY	FROBISHER-ALIDA	3-1-76	–	WATERFLOOD
NORTH DALESBORO UNIT NO. 1	ESSO RESOURCES	FROBISHER-ALIDA	12-1-70	–	WATERFLOOD
NORTHGATE MIDALE VOLUNTARY UNIT	SILVER BAY	MIDALE	1-1-84	–	WATERFLOOD
NORTHWEST BENSON MIDALE VOLUNTARY UNIT	SILVER BAY	MIDALE	2-1-85	–	WATERFLOOD
NOTTINGHAM NORTH ALIDA BEDS UNIT	MOBIL	ALIDA	10-1-60	–	–
OUNGRE VOLUNTARY UNIT NO. 1	SUNCOR	OUNGRE	1-1-68	12-1-69	WATERFLOOD
QUEENSVILLE WILLMAR KISBEY SAND VOLUNTARY UNIT	GULF	KISBEY SAND	7-1-69	–	–
RALPH MIDALE BEDS VOLUNTARY UNIT	MIDALE	MIDALE	10-1-87	–	WATERFLOOD
ROCANVILLE BAKKEN VOLUNTARY UNIT NO. 1	TRITON	BAKKEN	11-1-88	–	WATERFLOOD
ROSEBANK FROBISHER-ALIDA BEDS VOLUNTARY UNIT NO. 1	ESSO RESOURCES	FROBISHER-ALIDA	3-1-69	7-1-71	–
SOUTH ALAMEDA UNIT	UPTON	MIDALE	10-1-65	–	WATERFLOOD
SOUTH PINTO UNIT	AMOCO	MIDALE	2-1-65	10-1-66	WATERFLOOD
STEELMAN FROBISHER BEDS VOLUNTARY UNIT NO. 1	GULF	FROBISHER	10-1-70	–	–
STEELMAN NORTH MIDALE VOLUNTARY UNIT NO. 1	RIMOIL	MIDALE	5-1-83	–	WATERFLOOD
STEELMAN NORTH MIDALE VOLUNTARY UNIT NO. 2	RIMOIL	MIDALE	10-1-85	–	WATERFLOOD
STEELMAN UNIT NO. IA	ESSO RESOURCES	MIDALE	7-1-61	4-1-69	WATERFLOOD
STEELMAN UNIT NO. II	ESSO RESOURCES	MIDALE	7-1-61	–	WATERFLOOD
STEELMAN UNIT NO. III	GULF	MIDALE	7-1-61	–	WATERFLOOD
STEELMAN UNIT NO. IV	GULF	MIDALE	7-1-61	4-1-69	WATERFLOOD
STEELMAN UNIT NO. V	UPTON	MIDALE	7-1-61	7-1-65	WATERFLOOD
STEELMAN UNIT NO. VI	GULF	MIDALE	7-1-61	9-1-68	WATERFLOOD
STEELMAN UNIT NO. VII	UPTON	MIDALE	6-1-62	–	WATERFLOOD
TABLELAND VOLUNTARY UNIT NO. 1	HOME	WINNIPEGOSIS	6-1-88	–	WATERFLOOD
VIEWFIELD VOLUNTARY UNIT NO. 1	COMAPLEX	FROBISHER	5-1-74	–	WATERFLOOD
WEST CARNDUFF UNIT	ESSO RESOURCES	MIDALE	1-1-61	5-1-62	WATERFLOOD
WEYBURN UNIT	PANCANADIAN	MIDALE	7-1-63	3-1-71	WATERFLOOD
WEYBURN MIDALE BEDS VOLUNTARY UNIT NO. 2	OMEGA	MIDALE	9-1-87	–	WATERFLOOD
WEYBURN MIDALE BEDS VOLUNTARY UNIT NO. 3	MIDALE	MIDALE	1-1-88	–	WATERFLOOD
WEYBURN MIDALE BEDS VOLUNTARY UNIT NO. 4	MIDALE	MIDALE	6-1-88	–	WATERFLOOD
WEYBURN MIDALE BEDS VOLUNTARY UNIT NO. 5	SASKOIL	MIDALE	1-1-88	–	WATERFLOOD
WEYBURN MIDALE BEDS VOLUNTARY UNIT NO. 6	POSTELL	MIDALE	6-1-88	–	WATERFLOOD
WEYBURN MIDALE BEDS VOLUNTARY UNIT NO. 7	MIDALE	MIDALE	6-1-88	–	WATERFLOOD
WILLMAR FROBISHER-ALIDA VOLUNTARY UNIT NO. 1	SCEPTRE	FROBISHER-ALIDA	1-1-68	–	WATERFLOOD
WORKMAN-FROBISHER VOLUNTARY UNIT NO. 1	SCURRY-RAINBOW	FROBISHER	4-1-67	–	WATERFLOOD
WORKMAN-MIDALE VOLUNTARY UNIT NO. 1	SADELLE	MIDALE	4-1-68	–	WATERFLOOD
WORKMAN-MIDALE VOLUNTARY UNIT NO. 2	SCURRY-RAINBOW	MIDALE	9-1-68	–	WATERFLOOD

OIL AND GAS UNITS – ENHANCED RECOVERY PROJECTS

WATER SOURCE	INJECTION PATTERN	ACTIVE WELLS 12/88 PROD.	INJ.	DATE OF FIRST INJECTION	INJECTION RATE, 12/88 m3/DAY	UNIT NAME
MANNVILLE	PERIPHERAL	7	3	12-59	33	NORTH ALAMEDA UNIT
–	–	12	–	–	–	NORTH CANTAL UNIT
MANNVILLE	INV. 9-SPOT	7	1	11-76	28	NORTH CENTRAL WILLMAR VOLUNTARY UNIT
MANNVILLE	PERIPHERAL	9	2	02-71	158	NORTH DALESBORO UNIT NO. 1
MANNVILLE	INV. 9-SPOT	18	1	07-84	14	NORTHGATE MIDALE VOLUNTARY UNIT
MANNVILLE	INV. 9-SPOT	6	1	09-85	20	NORTHWEST BENSON MIDALE VOLUNTARY UNIT
–	–	22	–	–	–	NOTTINGHAM NORTH ALIDA BEDS UNIT
MANNVILLE	INV. 9-SPOT	48	13	12-66	501	OUNGRE VOLUNTARY UNIT NO. 1
–	–	3	–	–	–	QUEENSVILLE WILLMAR KISBEY SAND VOLUNTARY UNIT
MANNVILLE	PERIPHERAL	16	3	10-87	61	RALPH MIDALE BEDS VOLUNTARY UNIT
MANNVILLE	PERIPHERAL	8	1	06-88	14	ROCANVILLE BAKKEN VOLUNTARY UNIT NO. 1
–	–	34	–	–	–	ROSEBANK FROBISHER-ALIDA BEDS VOLUNTARY UNIT NO. 1
MANNVILLE	INV. 9-SPOT	14	6	02-63	82	SOUTH ALAMEDA UNIT
MANNVILLE	PERIPHERAL	19	10	02-65	481	SOUTH PINTO UNIT
–	–	8	–	–	–	STEELMAN FROBISHER BEDS VOLUNTARY UNIT NO. 1
MANNVILLE	INV. 9-SPOT	13	2	09-83	360	STEELMAN NORTH MIDALE VOLUNTARY UNIT NO. 1
MANNVILLE	INV. 9-SPOT	13	2	12-86	168	STEELMAN NORTH MIDALE VOLUNTARY UNIT NO. 2
MANNVILLE	INV. 9-SPOT	95	29	09-58	932	STEELMAN UNIT NO. IA
MANNVILLE	INV. 9-SPOT	60	5	02-62	1 739	STEELMAN UNIT NO. II
MANNVILLE	INV. 9-SPOT	73	19	01-62	1 622	STEELMAN UNIT NO. III
MANNVILLE	INV. 9-SPOT	96	35	02-62	1 645	STEELMAN UNIT NO. IV
MANNVILLE	INV. 9-SPOT	34	19	02-62	214	STEELMAN UNIT NO. V
MANNVILLE	INV. 9-SPOT	104	41	02-62	3 068	STEELMAN UNIT NO. VI
MANNVILLE	INV. 9-SPOT	12	3	10-62	102	STEELMAN UNIT NO. VII
MANNVILLE	PERIPHERAL	2	1	06-88	135	TABLELAND VOLUNTARY UNIT NO. 1
PRODUCED WATER	PERIPHERAL	8	0	11-88	0	VIEWFIELD VOLUNTARY UNIT NO. 1
MANNVILLE	INV. 9-SPOT	27	4	05-61	527	WEST CARNDUFF UNIT
MANNVILLE	INV. 9-SPOT	563	147	04-64	11 360	WEYBURN UNIT
PRODUCED WATER	INV. 9-SPOT	3	1	03-88	20	WEYBURN MIDALE BEDS VOLUNTARY UNIT NO. 2
MANNVILLE	INV. 5-SPOT	2	1	05-88	41	WEYBURN MIDALE BEDS VOLUNTARY UNIT NO. 3
MANNVILLE	INV. 9-SPOT	11	4	06-88	89	WEYBURN MIDALE BEDS VOLUNTARY UNIT NO. 4
MANNVILLE	INV. 9-SPOT	8	3	06-88	77	WEYBURN MIDALE BEDS VOLUNTARY UNIT NO. 5
MANNVILLE	INV. 9-SPOT	6	1	06-88	61	WEYBURN MIDALE BEDS VOLUNTARY UNIT NO. 6
MANNVILLE	INV. 9-SPOT	16	5	06-88	123	WEYBURN MIDALE BEDS VOLUNTARY UNIT NO. 7
MANNVILLE	INV. 9-SPOT	30	8	02-68	340	WILLMAR FROBISHER-ALIDA VOLUNTARY UNIT NO. 1
MANNVILLE	INV. 9-SPOT	29	11	06-67	677	WORKMAN-FROBISHER VOLUNTARY UNIT NO. 1
MANNVILLE	INV. 9-SPOT	1	1	04-68	10	WORKMAN-MIDALE VOLUNTARY UNIT NO. 1
MANNVILLE	PERIPHERAL	5	1	09-68	66	WORKMAN-MIDALE VOLUNTARY UNIT NO. 2

NON-UNITS – ENHANCED RECOVERY PROJECTS

POOL NAME	OPERATOR	PRODUCING ZONE	PROJECT EFFECTIVE DATE	LATEST BOUNDARY REVISION	ENHANCED RECOVERY PROJECTS
AREA I					
ABERFELDY G.P. SAND	HUSKY	G.P.	2-3-58	10-12-86	CONDUCTION HEATING
CELTIC WASECA SAND	MOBIL	WASECA & G.P.	12-8-77	8-31-84	CYCLIC STEAM
EYEHILL CUMMINGS SAND	MURPHY	CUMMINGS	12-8-77	5-15-84	IN-SITU COMBUSTION
GOLDEN LAKE SOUTH SPARKY SAND	HUSKY	SPARKY	11-6-68	5-31-83	IN-SITU WET COMB. (SUSP.)
GOLDEN LAKE SOUTH WASECA SAND	HUSKY	WASECA	3-19-81	6-6-84	IN-SITU WET COMB. (SUSP.)
GOLDEN LAKE SOUTH WASECA SAND	HUSKY	WASECA	2-8-82	–	IN-SITU OXYGEN WET-COMBUSTION (SUSP.)
LONE ROCK SPARKY SAND	TEXACO	SPARKY	10-24-83	–	STEAMFLOOD
MISCELLANEOUS LLOYDMINSTER SAND	CANTERRA	LLOYDMINSTER	2-4-74	3-31-82	CYCLIC STEAM (SUSPENDED)
PIKES PEAK WASECA SAND	HUSKY	WASECA	6-10-61	5-8-87	STEAMFLOOD & CYCLIC
SALT LAKE LLOYDMINSTER SAND	PETRO-CANADA	LLOYDMINSTER	6-13-88	–	WATERFLOOD
SENLAC LLOYDMINSTER SAND	SASKOIL	LLOYDMINSTER	3-23-88	–	PILOT WATERFLOOD
SILVERDALE SPARKY SAND	HOME	SPARKY	6-27-84	–	WATER ALTERNATING GAS
TANGLEFLAGS G.P. SAND	HUSKY	G.P.	11-30-83	–	IN-SITU WET COMB. (SUSP.)
TANGLEFLAGS NORTH LLOYD/CUMMINGS SAND	SCEPTRE	LLOYD/CUMMINGS	7-21-87	12-7-88	STEAMFLOOD/HORIZ. WELLS
WINTER CUMMINGS SAND	SASKOIL	CUMMINGS	8-26-88	–	HORIZONTAL WELLS
AREA II					
BUFFALO COULEE BAKKEN SAND	SASKOIL	BAKKEN	11-26-69	1-22-87	WATERFLOOD
BUFFALO COULEE BAKKEN SAND	PAGE	BAKKEN	11-23-79	7-31-80	WATERFLOOD
BUFFALO COULEE NORTH BAKKEN SAND	SASKOIL	BAKKEN	6-26-88	–	PILOT WATERFLOOD
COLEVILLE BAKKEN	PHILLIPS	BAKKEN	12-18-58	6-29-86	WATERFLOOD
DODSLAND VIKING SAND	EUCLA	VIKING	3-5-85	–	WATERFLOOD (SUSPENDED)
DODSLAND VIKING SAND	WESTAR	VIKING	6-15-84	–	PILOT WATERFLOOD
DODSLAND VIKING SAND	CALANA	VIKING	12-4-85	–	WATERFLOOD
KERROBERT VIKING SAND	CN EXPLORATION	VIKING	12-3-85	10-13-88	WATERFLOOD
SMILEY-DEWAR VIKING	ESSO RESOURCES	VIKING	9-22-61	5-2-88	WATERFLOOD
SMILEY-DEWAR VIKING	PETRO-CANADA	VIKING	1-30-73	11-1-73	WATERFLOOD
AREA III					
JAVA CANTUAR SAND	JARROD	CANTUAR	6-27-84	–	WATERFLOOD
AREA IV					
BENSON EAST MIDALE BEDS	MACEDON	MIDALE	12-2-87	–	WATERFLOOD
ELSWICK MIDALE BEDS	CAN. ROXY	MIDALE	6-10-87	–	WATERFLOOD
WEYBURN MIDALE BEDS	SASKOIL	MIDALE	6-13-88	–	WATERFLOOD

NON-UNITS – ENHANCED RECOVERY PROJECTS

WATER SOURCE	INJECTION PATTERN	ACTIVE WELLS 12/88 PROD.	INJ.	DATE OF FIRST INJECTION	INJECTION RATE, 12/88 m3/DAY	POOL NAME
						AREA I
–	–	4	–	–	–	ABERFELDY G.P. SAND
SURFACE WATER	INV. 5 & 9-SPOT	29	–	10-80	–	CELTIC WASECA SAND
GLACIAL DRIFT	INV. 5-SPOT	21	–	06-80	–	EYEHILL CUMMINGS SAND
DINA SAND	INV. 7 & 9-SPOT	–	–	07-68	–	GOLDEN LAKE SOUTH SPARKY SAND
PRODUCED WATER	INV. 5-SPOT	–	–	04-82	–	GOLDEN LAKE SOUTH WASECA SAND
GLACIAL DRIFT	INV. 7-SPOT	–	–	07-82	–	GOLDEN LAKE SOUTH WASECA SAND
SURFACE WATER	INV. 7-SPOT	13	3	11-84	–	LONE ROCK SPARKY SAND
SURFACE WATER	–	–	–	07-74	–	MISCELLANEOUS LLOYDMINSTER SAND
SURFACE WATER	–	64	6	07-81	–	PIKES PEAK WASECA SAND
MANNVILLE	INV. 9-SPOT	28	8	06-88	805	SALT LAKE LLOYDMINSTER SAND
PRODUCED WATER	INV. 9-SPOT	66	1	07-88	47	SENLAC LLOYDMINSTER SAND
SPARKY SAND	–	7	3	12-85	99	SILVERDALE SPARKY SAND
SURFACE WATER	INV. 7-SPOT	–	–	02-85	–	TANGLEFLAGS G.P. SAND
SURFACE WATER	–	2	–	06-88	–	TANGLEFLAGS NORTH LLOYD/CUMMINGS SAND
–	–	2	–	–	–	WINTER CUMMINGS SAND
						AREA II
BELLY RIVER	INV. 9-SPOT	15	4	07-69	318	BUFFALO COULEE BAKKEN SAND
BELLY RIVER	INV. 9-SPOT	17	7	06-80	233	BUFFALO COULEE BAKKEN SAND
BELLY RIVER	INV. 9-SPOT	7	1	06-88	1 126	BUFFALO COULEE NORTH BAKKEN SAND
BELLY RIVER	INV. 5 & 9-SPOT	217	98	01-59	5 145	COLEVILLE BAKKEN
B. RIVER & DEADWOOD	INV. 9-SPOT	–	–	07-85	–	DODSLAND VIKING SAND
BELLY RIVER	INV. 5-SPOT	9	4	11-85	22	DODSLAND VIKING SAND
B. RIVER & DEADWOOD	INV. 9-SPOT	40	7	12-87	219	DODSLAND VIKING SAND
DUPEROW	INV. 5-SPOT	39	15	03-86	40	KERROBERT VIKING SAND
BELLY RIVER	INV. 9-SPOT	124	21	02-82	421	SMILEY-DEWAR VIKING
BELLY RIVER	INV. 9-SPOT	32	9	03-73	37	SMILEY-DEWAR VIKING
						AREA III
MANNVILLE	–	4	1	07-84	37	JAVA CANTUAR SAND
						AREA IV
MANNVILLE	INV. 9-SPOT	5	1	12-87	44	BENSON EAST MIDALE BEDS
MANNVILLE	INV. 9-SPOT	19	7	12-87	221	ELSWICK MIDALE BEDS
MANNVILLE	INV. 9-SPOT	3	1	06-88	47	WEYBURN MIDALE BEDS

DEVELOPMENT DATA

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
ABERFELDY G.P. SAND	SOLUTION GAS DRIVE	CONDUCTION HEATING	1	SE 1/4 OF LSD.
ABERFELDY SPARKY SAND	SOLUTION GAS DRIVE WATER DRIVE PART. GAS CAP DRIVE	WATERFLOOD IN: 1: ABERFELDY UNIT (SUSPENDED) 2: SOUTH ABERFELDY SPARKY VOL. UNIT (SUSPENDED) IN-SITU WET COMBUSTION IN: ABERFELDY UNIT (SUSPENDED) STEAMFLOOD IN: ABERFELDY UNIT (SUSPENDED)	1	SE 1/4 OF LSD, EXCEPT: A: TWP 49, RGE 26, SEC: NW 1/4 OF 4, N 1/2 OF 5, 8, 9, W 1/2 OF 10, SW 1/4 OF 15, 16, 17, E 1/2 & NW 1/4 OF 18, 20, 21, 28, 29; TWP 48, RGE 27, SEC: N 1/2 OF 35, NW 1/4 OF 36; TWP 49, RGE 27, SEC: 1, 2, 11, 12; WHERE: NW 1/4 OF LSD; B: TWP 49, RGE 27, SEC: 14, 15, NE 1/4 OF 16, E 1/2 OF 21, 22, 23, 27, 28, 33, 34; WHERE: NE 1/4 OF LSD.
ALAMEDA MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: ALAMEDA CENTRAL UNIT 2: ALAMEDA EAST UNIT 3: NORTH ALAMEDA UNIT 4: SOUTH ALAMEDA UNIT	2	ODD NUMBERED LSD.
ALAMEDA WEST FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
ALAMEDA WEST MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: ALAMEDA WEST VOL. UNIT NO. 1	2	ODD NUMBERED LSD.
ALIDA EAST FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD, EXCEPT: TWP 5, RGE 33, SEC: 26, 27, 28, S 1/2 OF 33, S 1/2 & NW 1/4 OF 34; TWP 6, RGE 33, SEC: SW 1/4 OF 3; WHERE:
			2	EVEN NUMBERED LSD.
ALIDA NORTH ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
ALIDA WEST FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
ALSASK BASAL BLAIRMORE SAND	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD, EXCEPT: TWP 29, RGE 29, SEC: NW 1/4 OF 10, W 1/2 OF 15, SW 1/4 OF 22; WHERE: SEE POOL REGULATIONS CONCERNING PARTIAL LEGAL SUBDIVISIONS.
ANTELOPE LAKE EAST ROSERAY SAND	SOLUTION GAS DRIVE	WATERFLOOD	2	ODD NUMBERED LSD.
ANTELOPE LAKE UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: ANTELOPE LAKE UPPER SHAUNAVON VOLUNTARY UNIT	2	EVEN NUMBERED LSD.
ARCOLA FROBISHER-ALIDA BEDS	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	NONE	1	CENTRE OF LSD.
AUBURNTON FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
AVON HILL VIKING	SOLUTION GAS DRIVE	WATERFLOOD IN: AVON HILL VIKING VOL. UNIT	1	CENTER OF LSD.
BALDWINTON SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
BATTLE CREEK MADISON	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
BATTLE CREEK SOUTH UPPER SHAUNAVON	SOLUTION GAS DRIVE	NONE	2	ODD NUMBERED LSD.
BATTLE CREEK UPPER SHAUNAVON	PARTIAL WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
BATTRUM EAST ROSERAY SAND	SOLUTION GAS DRIVE	WATERFLOOD	2	EVEN NUMBERED LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
BATTRUM NORTH ROSERAY SAND	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
BATTRUM ROSERAY SAND	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	IN-SITU WET COMBUSTION IN: 1: BATTRUM UNIT NO. 1 2: BATTRUM UNIT NO. 2 3: BATTRUM VOL. UNIT NO. 3 WATERFLOOD IN: 1: BATTRUM UNIT NO. 1 2: BATTRUM VOL. UNIT NO. 3 3: BATTRUM UNIT NO. 4	1	CENTER OF LSD, EXCEPT: A: TWP 18, RGE 16, SEC: 30; TWP 18, RGE 17, SEC: 25, 26, E 1/2 OF 27, NE 1/4 OF 33, 34, 35, SE 1/4 & W 1/2 OF 36; WHERE: EVEN NUMBERED LSD; B: TWP 19, RGE 17, SEC: 1, S 1/2 OF 2; WHERE: ODD NUMBERED LSD.
			2	
			2	
BENCH UPPER SHAUNAVON	SOLUTION GAS DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
BENSON EAST MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD	2	ODD NUMBERED LSD.
BENSON FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
BENSON MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: BENSON UNIT 2: BENSON MIDALE VOLUNTARY UNIT NO. 1 3: NORTHWEST BENSON MIDALE VOLUNTARY UNIT	4	NW LSD OF 1/4 SECTION, EXCEPT: TWP 6, RGE 7, SEC: SW 1/4 OF 19, SW 1/4 OF 30; TWP 6, RGE 8, SEC: N 1/2 OF 17, N 1/2 & SE 1/4 OF 18, 19, 20, W 1/2 & NE 1/4 OF 21, N 1/2 OF 22, 23, W 1/2 & NE 1/4 OF 24, S 1/2 OF 25, LSDS 9 & 10 & SE 1/4 OF 26, N 1/2 & SW 1/4 OF 27, S 1/2 & NE 1/4 OF 28, SW 1/4 OF 29, S 1/2 & NW 1/4 OF 30, W 1/2 OF 31, SW 1/4 OF 34; TWP 6, RGE 9, SEC: SW 1/4 & NE 1/4 OF 13, NW 1/4 OF 15, 16, E 1/2 & NW 1/4 OF 17, 19, 20, 21, W 1/2 &NE 1/4 OF 22, W 1/2 & NE 1/4 OF 23, 24 TO 29 INCLUSIVE, S 1/2 OF 30, 36; TWP 6, RGE 10, SEC: E 1/2 OF 24, SE 1/4 OF 25; WHERE: ODD NUMBERED LSD.
			2	
BEVERLEY CANTUAR SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: BEVERLEY CANTUAR VOL. UNIT NO. 1	2	EVEN NUMBERED LSD.
BEVERLEY EAST CANTUAR SAND	SOLUTION GAS DRIVE	NONE	2	ODD NUMBERED LSD.
BEVERLEY NORTH CANTUAR SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: BEVERLEY NORTH CANTUAR VOLUNTARY UNIT NO. 1	2	ODD NUMBERED LSD, EXCEPT: TWP 15, RGE 17, SEC: LSD 10 OF 34, LSDS 3 & 4 OF 35; WHERE: CENTER OF LSD.
			1	
BEVERLEY UPPER ROSERAY SAND	SOLUTION GAS DRIVE GAS CAP DRIVE	WATERFLOOD IN: 1. BEVERLEY UNIT NO. 1 2. BEVERLEY VOL. UNIT NO. 2	1	CENTER OF LSD.
BIENFAIT MIDALE BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
BIG GULLY MCLAREN SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: BIG GULLY VOLUNTARY UNIT NO. 1 (SUSPENDED)	1	NW 1/4 OF LSD, EXCEPT: TWP 50, RGE 25, SEC: NE 1/4 OF 7, N 1/2 OF 8, SW 1/4 OF 17, SE 1/4 OF 18; WHERE: NE 1/4 OF LSD.
			1	
BIG GULLY NORTH LLOYD. SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
BIG GULLY WASECA SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: BIG GULLY VOLUNTARY UNIT NO. 1 (SUSPENDED)	1	NW 1/4 OF LSD, EXCEPT: TWP 50, RGE 25, SEC: NE 1/4 OF 7, N 1/2 OF 8, SW 1/4 OF 17, SE 1/4 OF 18; WHERE: NE 1/4 OF LSD.
			1	

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
BONE CREEK UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: BONE CREEK UNIT	2	EVEN NUMBERED LSD, EXCEPT: TWP 11, RGE 19, SEC: W 1/2 OF 2, 3, E 1/2 OF 4; WHERE:
			2	ODD NUMBERED LSD.
BROMHEAD MIDALE BEDS	SOLUTION GAS DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
BROWNING FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD, EXCEPT: TWP 6, RGE 5, SEC: NE 1/4 OF 19, N 1/2 OF 20, 29, SE 1/4 OF 30, SE 1/4 OF 32; WHERE:
			1	CENTER OF LSD.
BRYANT FROBISHER BEDS	SOLUTION GAS DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
BRYANT MIDALE BEDS	SOLUTION GAS DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
BUFFALO COULEE BAKKEN SAND	SOLUTION GAS DRIVE	WATERFLOOD	1/2	NE & SW 1/4 OF LSD.
BUFFALO COULEE NORTH BAKKEN SAND	SOLUTION GAS DRIVE	PILOT WATERFLOOD	1	SW 1/4 OF LSD.
BUTTE UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: BUTTE VOLUNTARY UNIT	2	ODD NUMBERED LSD.
BUZZARD LLOYDMINSTER SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
CACTUS LAKE BASAL MANNVILLE-BAKKEN SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: 1. CACTUS LAKE VOL. UNIT NO. 1 1. CACTUS LAKE VOL. UNIT NO. 2	1	CENTER OF LSD.
CANTAL FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
CANTAL SOUTH FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
CANTUAR EAST CANTUAR SAND	SOLUTION GAS DRIVE GAS CAP DRIVE	WATERFLOOD IN: EAST CANTUAR UNIT NO. 1 GAS STORAGE IN: EAST CANTUAR GAS UNIT	2	SW 1/4 OF EVEN LSD.
CANTUAR EAST ROSERAY SAND	SOLUTION GAS DRIVE GAS CAP DRIVE	WATERFLOOD IN: 1: EAST CANTUAR UNIT NO. 1 2: EAST CANTUAR UNIT NO. 2 GAS STORAGE IN: EAST CANTUAR GAS UNIT	2	SW 1/4 OF EVEN LSD.
CANTUAR LOWER ROSERAY SAND	WATER DRIVE	NONE	1	SW 1/4 OF LSD.
CANTUAR MAIN CANTUAR SAND	SOLUTION GAS DRIVE GAS CAP DRIVE	WATERFLOOD IN: CANTUAR UNIT	1	SW 1/4 OF LSD.
CANTUAR NORTH ROSERAY SAND	SOLUTION GAS DRIVE	NONE	2	ODD NUMBERED LSD.
CARNDUFF FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD, EXCEPT: TWP 3, RGE 33, SEC: W 1/2 OF 5, 6; TWP 3, RGE 34, SEC: 1, 2, 3, 4, 9, 10, 11, W 1/2 OF 12, W 1/2 OF 14, 15, 16; WHERE:
			2	EVEN NUMBERED LSD.
CARNDUFF MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: WEST CARNDUFF UNIT 2: EAST CARNDUFF UNIT 3: CARNDUFF VOLUNTARY UNIT NO. 1 4: CARNDUFF SOUTH MIDALE VOLUNTARY UNIT	2	ODD NUMBERED LSD, EXCEPT: TWP 3, RGE 33, SEC: NE 1/4 & W 1/2 OF 4, 5, 6, 7, 8, 9, 16, 17, S 1/2 OF 18; TWP 3, RGE 34, SEC: 1, 2, 3, 4, 11, 12, S 1/2 OF 13; WHERE:
			2	EVEN NUMBERED LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
CELTIC G.P. SAND	SOLUTION GAS DRIVE	PILOT INTERMITTENT STEAM INJECTION	1	SE 1/4 OF LSD.
CELTIC MANNVILLE SANDS	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
CELTIC SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD, EXCEPT: TWP 52, RGE 23, SEC: S 1/2 OF 3; WHERE:
			1	NW 1/4 OF LSD.
CELTIC WASECA SAND	SOLUTION GAS DRIVE	PILOT INTERMITTENT STEAM INJECTION	1	SE 1/4 OF LSD, EXCEPT: TWP 52, RGE 23, SEC: SW 1/4 OF 10; WHERE:
			1	NW 1/4 OF LSD.
CHAMBERY UPPER SHAUNAVON	SOLUTION GAS DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
CLARILAW FROBISHER-ALIDA BEDS	SOLUTION GAS DRIVE	NONE	2	ODD NUMBERED LSD.
CLARILAW WEST FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
CLINTONVILLE SHAUNAVON	SOLUTION GAS DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
COLEVILLE BAKKEN SAND	SOLUTION GAS DRIVE	WATERFLOOD	1/2	NE & SW 1/4 OF LSD.
COLEVILLE MANNVILLE SAND	SOLUTION GAS DRIVE	NONE	1	SW 1/4 OF LSD.
COLEVILLE SOUTH BAKKEN SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: COLEVILLE S. BAKKEN VOL. UNIT	1	NE 1/4 OF LSD.
COLEVILLE SOUTH MANNVILLE SAND	SOLUTION GAS DRIVE	NONE	1	NE 1/4 OF LSD.
COLGATE MIDALE BEDS	SOLUTION GAS DRIVE	NONE	2	ODD NUMBERED LSD.
COSINE LAKE LLOYDMINSTER SAND	GAS CAP DRIVE	NONE	1	SE 1/4 OF LSD, EXCEPT: TWP 37, RGE 28, SEC: LSDS 4,5,12 & 13 OF 7, LSDS 4,5,12 & 13 OF 18, LSDS 4,5,12 & 13 OF 19; TWP 37, RGE 29, SEC: LSDS 1,8,9 & 16 OF 12, LSDS 1,8,9 & 16 OF 13, LSDS 1,8,9 & 16 OF 24; WHERE: SEE POOL REGULATIONS REGARDING PARTIAL LEGAL SUBDIVISIONS.
COURT BAKKEN SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: COURT BAKKEN VOL. UNIT NO. 1	1	SE 1/4 OF LSD.
COVINGTON UPPER SHAUNAVON	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	WATERFLOOD IN: COVINGTON UNIT NO. 1	2	EVEN NUMBERED LSD.
COVINGTON WEST UPPER SHAUNAVON	SOLUTION GAS DRIVE	NONE	4	NE LSD OF 1/4 SECTION.
CRYSTAL HILL SOURIS VALLEY BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD, EXCEPT: TWP 10, RGE 1, SEC: 18 & 19; TWP 10, RGE 2, SEC: NE 1/4 OF 13, E 1/2 OF 24; WHERE:
			1	CENTER OF LSD.
DALESBORO FROBISHER-ALIDA BEDS	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	NONE	2	ODD NUMBERED LSD.
DEE VALLEY EAST MANNVILLE SANDS	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
DEE VALLEY EAST SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
DEE VALLEY EAST WASECA SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
DEE VALLEY WASECA SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
DELTA UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: DELTA UNIT NO. 1 2: DELTA UNIT NO. 2 3: DELTA VOL. UNIT NO. 3	2	EVEN NUMBERED LSD.
DODSLAND VIKING SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: EAGLE LAKE VIKING VOLUNTARY UNIT 2: EAST DODSLAND VOL. UNIT 3: GLENEATH SOUTH VOL. UNIT 4: GLENEATH UNIT 5: KIYIU LAKE VOLUNTARY UNIT 6: KIYIU LAKE VOL. UNIT NO. 2 7: NORTH DODSLAND VOL. UNIT	1	CENTER OF LSD.
DOLLARD LOWER SHAUNAVON	SOLUTION GAS DRIVE	NONE	4 2	SE LSD OF 1/4 SECTION, EXCEPT: TWP 7, RGE 19, SEC: NW 1/4 OF 29; WHERE: ODD NUMBERED LSD.
DOLLARD UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: DOLLARD UNIT 2: EAST DOLLARD VOLUNTARY UNIT	2 4	ODD NUMBERED LSD, EXCEPT: TWP 7, RGE 19, SEC: N 1/2 OF 8, W 1/2 OF 18, 17, E 1/2 OF 18; TWP 7, RGE 20, SEC: S 1/2 OF 10, NE 1/4 OF 19, SW 1/4 OF 20, NW 1/4 OF 27, N 1/2 OF 28, SE 1/4 OF 30; WHERE: NW LSD OF 1/4 SECTION.
DRUID MANNVILLE SANDS	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
DULWICH SPARKY SAND	SOLUTION GAS DRIVE	NONE	1/4	EACH QUADRANT OF LSD.
DULWICH NORTH SPARKY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: NORTH DULWICH VOLUNTARY UNIT (SUSPENDED)	1/2	NE & SW 1/4 OF LSD.
EAR LAKE WASECA SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
EASTBROOK UPPER SHAUNAVON	SOLUTION GAS DRIVE	NONE	2	EVEN NUMBERED LSD.
EASTEND SHAUNAVON	SOLUTION GAS DRIVE	NONE	2 4	EVEN NUMBERED LSD, EXCEPT: TWP 6, RGE 19, SEC: 5, 6, 7, 8, W 1/2 OF 18; TWP 6, RGE 20, SEC: E 1/2 OF 1; WHERE: NW LSD IN 1/4 SECTION.
EDAM WASECA SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
EDAM WEST SPARKY/G.P. SAND	SOLUTION GAS DRIVE	NONE	1/2	NW & SE 1/4 OF LSD.
EDAM WEST MANNVILLE SAND	SOLUTION GAS DRIVE	NONE	1/2	NW & SE 1/4 OF LSD.
EDAM WEST WASECA SAND	SOLUTION GAS DRIVE	NONE	1/2	NW & SE 1/4 OF LSD.
EDENVALE TILSTON BEDS	PARTIAL WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
ELMORE FROBISHER BEDS	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	WATERFLOOD IN: ELMORE FROBISHER BEDS VOLUNTARY UNIT NO. 1	2	ODD NUMBERED LSD.
ELMORE MIDALE BEDS	SOLUTION GAS DRIVE	NONE	2	ODD NUMBERED LSD.
ELSWICK MIDALE BEDS	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	WATERFLOOD	2	ODD NUMBERED LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
EPPING G.P. SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: SOUTH EPPING UNIT NO. 1	1	SE 1/4 OF LSD, EXCEPT: A: TWP 47, RGE 27, SEC: S 1/2 & NW 1/4 OF 31, SW 1/4 OF 32; TWP 48, RGE 27, SEC: SW 1/4 OF 6; TWP 47, RGE 26, SEC: N 1/2 OF 25, 34, 35, 36; TWP 48, RGE 26, SEC: S 1/2 OF 1, S 1/2 OF 2; WHERE:
			1	NW 1/4 OF LSD; B: TWP 47, RGE 27, SEC: W 1/2 OF 17, 18, 19, 20, S 1/2 & NW 1/4 OF 29, 30; WHERE:
			1/2	NW & SE 1/4 OF LSD.
EPPING SPARKY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: SOUTH EPPING UNIT NO. 1 2: SOUTH WEST EPPING SPARKY VOLUNTARY UNIT NO. 1	1	SE 1/4 OF LSD, EXCEPT: TWP 47, RGE 27, SEC: W 1/2 OF 17, 18, 19, 20, W 1/2 & SE 1/4 OF 29, 30, W 1/2 & SE 1/4 OF 31, SW 1/4 OF 32; TWP 48, RGE 27, SEC: SW 1/4 OF 6; TWP 47, RGE 26, SEC: N 1/2 OF 25, 34, 35, 36; TWP 48, RGE 26, SEC: S 1/2 OF 1, S 1/2 OF 2, SE 1/4 OF 3; WHERE:
			1/2	NW & SE 1/4 OF LSD.
EUREKA VIKING	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: NORTH EUREKA UNIT 2: SOUTH EUREKA UNIT	1	CENTER OF LSD.
EVESHAM NORTH MCLAREN SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
EVESHAM NORTH SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
EVESHAM SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
EYEHILL CUMMINGS SAND	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	PILOT IN-SITU DRY COMBUSTION	1	CENTER OF LSD.
FERTILE TILSTON BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
FERTILE TILSTON-SOURIS VALLEY BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
FLAT LAKE RATCLIFFE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: FLAT LAKE RATCLIFFE VOLUNTARY UNIT NO. 1	4	SW LSD IN 1/4 SECTION, EXCEPT: TWP 1, RGE 16, SEC: S 1/2 OF 1, S 1/2 OF 2, S 1/2 OF 3, S 1/2 OF 5, S 1/2 OF 6; WHERE: WELLS LOCATED A MINIMUM DISTANCE OF 1600 FEET FROM U.S. BORDER.
FLORENCE FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
FOREST BANK MANNVILLE SANDS	SOLUTION GAS DRIVE	NONE	1	SW 1/4 OF LSD, EXCEPT: A: TWP 48, RGE 24, SEC: 32; TWP 49, RGE 24, SEC: 6; WHERE:
			1	SE 1/4 OF LSD; B: TWP 49, RGE 24, SEC: 7, 18; TWP 49, RGE 25, SEC: 12, 13; WHERE:
			1	NE 1/4 OF LSD.
FOREST BANK SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SW 1/4 OF LSD, EXCEPT: SEE FOREST BANK MANNVILLE SANDS.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
FOREST BANK WASECA SAND	SOLUTION GAS DRIVE	NONE	1	SW 1/4 OF LSD, EXCEPT: SEE FOREST BANK MANNVILLE SANDS.
FORGAN VIKING SAND	SOLUTION GAS DRIVE	NONE	1	CENTRE OF LSD.
FOSTERTON ROSERAY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: FOSTERTON MAIN UNIT 2: FOSTERTON NORTHWEST UNIT (SUSPENDED) 3: WEST FOSTERTON VOLUNTARY UNIT	1	SW 1/4 OF LSD, EXCEPT: TWP 17, RGE 18, SEC: 4, E 1/2 OF 5, E 1/2 OF 8, 9, LSDS 1,2,3,4,8,9 & 16 OF 16, LSDS 1 & 2 OF 17; WHERE:
		IN-SITU WET COMBUSTION IN: FOSTERTON NORTHWEST UNIT	1	CENTER OF LSD.
FOSTERTON SOUTH CANTUAR SAND	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
FOSTERTON SOUTH ROSERAY SAND	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
FREDA LAKE RATCLIFFE BEDS	SOLUTION GAS DRIVE	NONE	2	ODD NUMBERED LSD.
FREEMONT SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
FREEMONT WASECA SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
FREESTONE FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD, EXCEPT: TWP 9, RGE 6, SEC: W 1/2 OF 7, W 1/2 OF 17, 18,19, W 1/2 OF 20; TWP 9, RGE 7, SEC: 11, 12, 13; WHERE:
			1	CENTER OF LSD.
FRYS EAST TILSTON-SOURIS VALLEY BEDS	WATER DRIVE	NONE	1	CENTRE OF LSD.
FRYS TILSTON-SOURIS VALLEY BEDS	WATER DRIVE	NONE	1	CENTRE OF LSD.
FURNESS SPARKY SAND	SOLUTION GAS DRIVE	NONE	1/4	CENTER OF EACH 1/4 LSD.
FUSILIER BAKKEN SAND	SOLUTION GAS DRIVE GAS CAP DRIVE	NONE	1	CENTER OF LSD.
GAINSBOROUGH FROBISHER-ALIDA BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: GAINSBOROUGH FROBISHER-ALIDA VOLUNTARY UNIT	2	ODD NUMBERED LSD.
GAISBOROUGH NORTH FROBISHER-ALIDA BEDS	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	NONE	2	EVEN NUMBERED LSD, EXCEPT: TWP 2, RGE 30, SEC: NW 1/4 OF 31, TWP 2, RGE 31, SEC: N 1/2 OF 36; WHERE:
			2	ODD NUMBERED LSD.
GLEN EWEN FROBISHER BEDS	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	NONE	2	ODD NUMBERED LSD, EXCEPT: TWP 2, RGE 1, SEC: LSD 1,2,3,4 OF SECTIONS 1 TO 5 INCLUSIVE; WHERE: SEE POOL REGULATIONS REGARDING PARTIAL LEGAL SUBDIVISIONS.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
GLEN EWEN MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: GLEN EWEN UNIT	2	ODD NUMBERED LSD, EXCEPT: A: TWP 2, RGE 1, SEC: N 1/2 OF 26, 32, S 1/2 OF 33, S 1/2 & NW 1/4 OF 34, SE 1/4 OF 35; TWP 3, RGE 1, SEC: NW 1/4 OF 8, N 1/2 OF 10, N 1/2 OF 11, NE 1/4 OF 12, S 1/2 OF 13, W 1/2 OF 15, SE 1/4 OF 16, W 1/2 & NE 1/4 OF 20, W 1/2 OF 22; WHERE:
			4	SE LSD OF 1/4 SECTION; B: TWP 2, RGE 1, SEC: LSD 1,2,3,4 OF SECTIONS 1 TO 5 INCLUSIVE; WHERE: SEE POOL REGULATIONS REGARDING PARTIAL LEGAL SUBDIVISIONS.
GOLDEN LAKE NORTH MANNVILLE SANDS	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD, EXCEPT: TWP 48, RGE 23, SEC: 19, 29, 30, E 1/2 & SW 1/4 OF 31, 32; TWP 48, RGE 24, SEC: NE 1/4 OF 24, SE 1/4 OF 25; WHERE:
			1	SW 1/4 OF LSD.
GOLDEN LAKE NORTH SPARKY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: GOLDEN LAKE VOLUNTARY UNIT (SUSPENDED)	1	SE 1/4 OF LSD, EXCEPT: SEE GOLDEN LAKE NORTH MANNVILLE SANDS POOL.
GOLDEN LAKE NORTH WASECA SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: GOLDEN LAKE VOLUNTARY UNIT (SUSPENDED)	1	SE 1/4 OF LSD, EXCEPT: SEE GOLDEN LAKE NORTH MANNVILLE SANDS POOL.
GOLDEN LAKE SOUTH MANNVILLE SANDS	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
GOLDEN LAKE SOUTH SPARKY SAND	SOLUTION GAS DRIVE	PILOT IN-SITU WET COMBUSTION (SUSPENDED)	1	SE 1/4 OF LSD.
GOLDEN LAKE SOUTH WASECA SAND	SOLUTION GAS DRIVE	TWO IN-SITU WET COMBUSTION PILOT PROJECTS-OXYGEN ENRICHED (SUSPENDED)	1	SE 1/4 OF LSD.
GRIFFIN FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
GULL LAKE BASAL CANTUAR SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: JOHNSTON UNIT 2: GULL LAKE CANTUAR VOLUNTARY UNIT NO. 1	1	SE 1/4 OF LSD.
GULL LAKE CENTRAL UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: GULL LAKE UPPER SHAUNAVON VOLUNTARY UNIT NO. 1	2	SE 1/4 OF EVEN LSD.
GULL LAKE NORTH UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: GULL LAKE N. SHAUNAVON UNIT	1	SE 1/4 OF LSD.
GULL LAKE SOUTH UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN GULL LAKE SOUTH VOLUNTARY UNIT NO. 1	4	SW LSD OF 1/4 SECTION, EXCEPT: TWP 12, RGE 19, SEC: NE 1/4 OF 21, 22, 23, N 1/2 & SW 1/4 OF 24, SW 1/4 OF 26, S 1/2 OF 27, SE 1/4 OF 28; WHERE:
			4	NE LSD OF 1/4 SECTION.
GULLY LAKE WASECA SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: GULLY LAKE WASECA VOL. UNIT	1	SE 1/4 OF LSD.
HANDSWORTH ALIDA BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
HARTAVEN FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
HASTINGS EAST FROBISHER BEDS	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
HASTINGS FROBISHER BEDS	SOLUTION GAS DRIVE WATER DRIVE	WATERFLOOD IN: 1: HASTINGS FROBISHER UNIT 2: HASTINGS VOLUNTARY UNIT NO. 1 3: HASTINGS VOLUNTARY UNIT NO. 2	2	EVEN NUMBERED LSD, EXCEPT: A: TWP 3, RGE 33, SEC: SE 1/4 & N 1/2 OF 10, 15, N 1/2 OF 16, 21, 22, S 1/2 OF 27, S 1/2 OF 28, LSDS 13,14 & NE 1/4 OF 31; TWP 4, RGE 33, SEC: LSDS 1,2,5,6 & N 1/2 OF 6, LSDS 3,4,5 & SE 1/4 OF 7; TWP 3, RGE 34, SEC: 21, 22, W 1/2 OF 26, 27, 28, 33, 34, SW 1/4 OF 35; TWP 4, RGE 34, SEC: LSDS 13,14 & NE 1/4 OF 1, 3, 4, NE 1/4 OF 9, N 1/2 OF 10, LSDS 5,6,7,8 & N 1/2 OF 11, LSDS 9,10 & S 1/2 OF 12, LSDS 1,2 & W 1/2 OF 14, N 1/2 & SW 1/4 OF 15, 16, SE 1/4 OF 21, S 1/2 & NE 1/4 OF 22, LSDS 3 & 4 OF 23; TWP 3, RGE 1, SEC: 25, 36; TWP 4, RGE 1, SEC: S 1/2 OF 1, LSDS 7,8 & N 1/2 OF 12, LSDS 11,12, NE 1/4 & S 1/2 OF 13, LSDS 7 & 8 OF 14, SE 1/4 OF 24; WHERE:
			1	CENTER OF LSD; B: TWP 4, RGE 34, SEC: SE 1/4 OF 9, SW 1/4 OF 10, NE 1/4 OF 21, NW 1/4 OF 22, W 1/2 OF 27, 28, 33, W 1/2 OF 34; WHERE: SEE MRO 138/84 A 97 RE FRACTIONAL LEGAL SUBDIVISIONS.
HASTINGS WEST FROBISHER BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
HAZELWOOD SOUTH TILSTON BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
HAZELWOOD TILSTON BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
HAZELWOOD WEST TILSTON BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
HAZLET ROSERAY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: HAZLET UNIT	2	EVEN NUMBERED LSD.
HEARTS HILL BAKKEN SAND	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
HILLMOND G.P. SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
HILLMOND SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
HOFFER RATCLIFFE BEDS	SOLUTION GAS DRIVE	NONE	4	SE LSD OF 1/4 SECTION, EXCEPT: A: TWP 1, RGE 15, SEC: 28, 29, S 1/2 OF 32, S 1/2 OF 33; WHERE:
			4	SW LSD OF 1/4 SECTION; B: TWP 1, RGE 15, SEC: 30; TWP 1, RGE 16, SEC: E 1/2 OF 25; WHERE:
			2	ODD NUMBERED LSD.
HOOSIER BAKKEN SAND	SOLUTION GAS DRIVE GAS CAP DRIVE	WATERFLOOD IN: HOOSIER BAKKEN VOL. UNIT NO. 1	1	CENTER OF LSD.
HUME FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
HUME MIDALE BEDS	SOLUTION GAS DRIVE	NONE	4	NW LSD OF 1/4 SECTION, EXCEPT: TWP 7, RGE 12, SEC: 31, W 1/2 OF 32; TWP 8, RGE 12, SEC: N 1/2 OF 3, SE 1/4 OF 4, S 1/2 OF 5, S 1/2 OF 6; WHERE:
			2	ODD NUMBERED LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
HUMMINGBIRD BAKKEN SAND	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
HUMMINGBIRD BIRDBEAR	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
HUMMINGBIRD RATCLIFFE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: HUMMINGBIRD RATCLIFFE VOLUNTARY UNIT NO. 1	2	ODD NUMBERED LSD.
HUNTOON FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
HUNTOON MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: HUNTOON MIDALE BEDS VOLUNTARY UNIT NO. 1 2: HUNTOON MIDALE BEDS VOLUNTARY UNIT NO. 2	4	SE LSD IN 1/4 SECTION, EXCEPT: TWP 6, RGE 9, SEC: N 1/2 OF 30, 31, 32, 33, 34; TWP 7, RGE 9, SEC: W 1/2 OF 2, 3, 4, E 1/2 OF 5, 9, 10; TWP 6, RGE 10, SEC: N 1/2 OF 25, NE 1/4 OF 26, E 1/2 OF 33, 34, 35, 36; TWP 7, RGE 10, SEC: 4; WHERE:
			2	ODD NUMBERED LSD.
ILLERBRUN UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: ILLERBRUN VOLUNTARY UNIT	4	SE LSD IN 1/4 SECTION.
INGOLDSBY FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD, EXCEPT: TWP 4, RGE 31, SEC: NW 1/4 OF 6, LSDS 7,8, W 1/2 & NE 1/4 OF 7, LSDS 15,16 & NW 1/4 OF 8, N 1/2 OF 9, W 1/2 OF 16, LSDS 1 & 2 OF 16, LSDS 13 & 14 OF 22, SW 1/4 OF 27, SE 1/4 OF 28; TWP 4, RGE 32, SEC: LSDS 7 & 8 OF 12; WHERE:
			1	CENTRE OF LSD.
INGOLDSBY WEST FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	1	CENTRE OF LSD.
INNES FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
INSTOW UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: INSTOW UNIT 2: INSTOW SOUTH UPPER SHAUNAVON VOLUNTARY UNIT	2	ODD NUMBERED LSD.
JAVA CANTUAR SAND	SOLUTION GAS DRIVE	WATERFLOOD	2	ODD NUMBERED LSD.
JOHNSTON UPPER SHAUNAVON	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
KENOSEE TILSTON BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
KERROBERT VIKING SAND	SOLUTION GAS DRIVE	WATERFLOOD	1	CENTER OF LSD.
KISBEY BIRDBEAR	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
KISBEY FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
LAKE ALMA RATCLIFFE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: LAKE ALMA VOLUNTARY UNIT	2	EVEN NUMBERED LSD.
LANDROSE MCLAREN SAND	SOLUTION GAS DRIVE	NONE	1	NE 1/4 OF LSD, EXCEPT: TWP 50, RGE 25, SEC: W 1/2 OF 6, W 1/2 OF 7, SW 1/4 OF 18; TWP 50 RGE 26, SEC: E 1/2 & NW 1/4 OF 1, 12, S 1/2 OF 13; WHERE:
			1/2	NE & SW 1/4 OF LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
LANDROSE WASECA SAND	SOLUTION GAS DRIVE	NONE	1	NE 1/4 OF LSD, EXCEPT: TWP 50, RGE 25, SEC: W 1/2 OF 6, W 1/2 OF 7, SW 1/4 OF 18; TWP 50 RGE 26, SEC: E 1/2 & NW 1/4 OF 1, 12, S 1/2 OF 13; WHERE:
			1/2	NE & SW 1/4 OF LSD.
LASHBURN SOUTH SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SW 1/4 OF LSD, EXCEPT: TWP 48, RGE 23, SEC: 18; TWP 48, RGE 24, SEC: NW 1/4 OF 14, NE 1/4 OF 15, E 1/2 OF 22, 23; WHERE:
			1	SE 1/4 OF LSD.
LASHBURN SOUTH WASECA SAND	SOLUTION GAS DRIVE	NONE	1	SW 1/4 OF LSD, EXCEPT: SEE LASHBURN SOUTH SPARKY SAND POOL.
LASHBURN WASECA SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: LASHBURN WASECA VOLUNTARY UNIT (SUSPENDED)	1	SW 1/4 OF LSD.
LASHBURN WEST SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
LEITCHVILLE SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: LEITCHVILLE SHAUNAVON VOLUNTARY UNIT	4	SW LSD OF 1/4 SECTION, EXCEPT: TWP 8, RGE 18, SEC: N 1/2 OF 31, N 1/2 OF 32 TWP 9, RGE 18, SEC: W 1/2 OF 4, 5, 6, 7, 8, 9, W 1/2 OF 10, S 1/2 & NW 1/4 OF 16, 17, 18, S 1/2 OF 19, S 1/2 OF 20; WHERE:
			2	EVEN NUMBERED LSD.
LEON LAKE SHAUNAVON	SOLUTION GAS DRIVE	PILOT WATERFLOOD WATERFLOOD	4	SE LSD OF 1/4 SECTION.
LIGHTNING TILSTON BED II	WATER DRIVE	NONE	1	CENTRE OF LSD.
LLOYDMINSTER SPARKY SAND	SOLUTION GAS DRIVE	NONE	1/2	NW & SE 1/4 OF LSD, EXCEPT: SPECIAL PROVISIONS FOR PARTIAL LSD.
LONE ROCK SPARKY SAND	SOLUTION GAS DRIVE	PILOT STEAMFLOOD	1/4	CENTER OF EACH 1/4 LSD.
LOST HORSE HILL FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD, EXCEPT: TWP 9, RGE 8, SEC: LSDS 5,8,7,8,11,12 & NE 1/4 OF 32, LSDS 13,14,15, & 16 OF 33; TWP 10, RGE 8, SEC: LSDS 5,6 & NW 1/4 OF 3, LSDS 11, 12 & S 1/2 & NE 1/4 OF 4, LSDS 3 & 4 OF 10, 11, 12, SW 1/4 OF 13, S 1/2 OF 14, SE 1/4 OF 15; WHERE:
			1	CENTER OF LSD.
LOUGHEED MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD	2	ODD NUMBERED LSD.
LOVERNA DETRITAL	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
LOW LAKE WASECA SAND	SOLUTION GAS DRIVE	NONE	1/2	NE & SW 1/4 OF LSD.
LUCKY HILLS VIKING	SOLUTION GAS DRIVE GAS CAP DRIVE	NONE	2	EVEN NUMBERED LSD, EXCEPT: TWP 30, RGE 23, SEC: W 1/2 OF 18, W 1/2 & NE 1/4 OF 19, N 1/2 OF 20, S 1/2 OF 28, S 1/2 OF 29, S 1/2 OF 30; WHERE:
			1	CENTER OF LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
LUSELAND BAKKEN SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
MACKLIN SPARKY SAND	SOLUTION GAS DRIVE	PILOT WATERFLOOD	1	CENTER OF LSD.
MACOUN MIDALE BEDS	PARTIAL WATER DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
MACOUN WEST MIDALE BEDS	PARTIAL WATER DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
MAIDSTONE MCLAREN SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
MAIDSTONE WASECA SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
MAIN SUCCESS ROSERAY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: SUCCESS MAIN UNIT	1	SW 1/4 OF LSD.
MANITO LAKE SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
MARSDEN SOUTH SPARKY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: MARSDEN SOUTH SPARKY SAND VOLUNTARY UNIT NO. 1	1	SE 1/4 OF LSD.
MARSDEN SPARKY SAND	SOLUTION GAS DRIVE	NONE	1/4	CENTER OF EACH 1/4 LSD.
MELROSE FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
MIDALE CENTRAL FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
MIDALE CENTRAL MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: MIDALE UNIT 2: MIDALE SOUTH VOL. UNIT NO. 1 3: MIDALE SOUTH VOL. UNIT NO. 2 PILOT CARBON DIOXIDE FLOOD IN: MIDALE UNIT (SUSPENDED)	2	ODD NUMBERED LSD.
MINARD MIDALE BEDS	SOLUTION GAS DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
MOOSE MOUNTAIN TILSTON BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
MOOSE VALLEY TILSTON BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
MORRISVIEW FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
NEILBURG MCLAREN SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
NEPTUNE RATCLIFFE BEDS	SOLUTION GAS DRIVE	NONE	4	CENTER OF 1/4 SECTION.
NORTH ANTLER MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: ANTLER VOLUNTARY UNIT NO. 1	2	ODD NUMBERED LSD.
NORTHGATE FROBISHER BEDS	WATER DRIVE	NONE	4	NE LSD OF 1/4 SECTION.
NORTHGATE MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: NORTHGATE MIDALE VOLUNTARY UNIT	2	ODD NUMBERED LSD.
NORTH HANDSWORTH ALIDA BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
NORTH HOOSIER BAKKEN SAND	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	WATERFLOOD IN: NORTH HOOSIER BAKKEN SAND VOLUNTARY UNIT	1	CENTER OF LSD.
NORTH HOOSIER BASAL BLAIRMORE	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	WATERFLOOD IN: NORTH HOOSIER BASAL BLAIRMORE VOLUNTARY UNIT	1/2	SW & NE 1/4 OF LSD.
NORTHMINSTER SPARKY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: NORTHMINSTER SPARKY VOLUNTARY UNIT	1	SW 1/4 OF LSD, EXCEPT: TWP 50, RGE 27, SEC: NW 1/4 OF 2, 11, LSDS 12,13,14,15 & 16 OF 12, S 1/2 & NW 1/4 OF 13, 14, N 1/2 OF 19, NW 1/4 OF 20, W 1/2 OF 29, 30, 31; TWP 50, RGE 28, SEC: E 1/2 OF 36; WHERE:
			1	SE 1/4 OF LSD.
NORTHMINSTER NORTH G.P. SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
NORTHMINSTER NORTH SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
NORTH PREMIER ROSERAY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: NORTH PREMIER UNIT NO. 1 2: NORTH PREMIER UNIT NO. 4	1	SW 1/4 OF LSD.
NORTH PREMIER UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: NORTH PREMIER UPPER SHAUNAVON VOLUNTARY UNIT 2: NORTH PREMIER UNIT NO. 4	1	SW 1/4 OF LSD, EXCEPT: TWP 14, RGE 19, SEC: 26, E 1/2 OF 27, 34, 35, 36; TWP 15, RGE 18, SEC: W 1/2 OF 6; WHERE:
			2	SW 1/4 OF ODD LSD.
NORTH SMILEY BAKKEN SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
NOTTINGHAM ALIDA BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
NOTUKEU UPPER SHAUNAVON	SOLUTION GAS DRIVE	NONE	4	SE LSD OF 1/4 SECTION.
OAKLEY FROBISHER BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
OUNGRE RATCLIFFE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: OUNGRE VOLUNTARY UNIT NO. 1	2	ODD NUMBERED LSD, EXCEPT: TWP 2, RGE 14, SEC: N 1/2 OF 14, NW 1/4 OF 15, NE 1/4 OF 16, N 1/2 OF 19, N 1/2 & SE 1/4 OF 20, 21, 22, 23, 26 TO 30, SE 1/4 OF 31, S 1/2 OF 32, SW 1/4 OF 33; TWP 2, RGE 15, SEC: NE 1/4 OF 25; WHERE:
			1	CENTER OF LSD.
PARKMAN SOURIS VALLEY BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
PARKMAN SOUTH TILSTON-SOURIS VALLEY	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
PARKMAN TILSTON BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
PARKMAN TILSTON-SOURIS VALLEY	WATER DRIVE	NONE	1	CENTER OF LSD.
PENNANT UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: PENNANT UPPER SHAUNAVON VOLUNTARY UNIT	2	EVEN NUMBERED LSD.
PIKES PEAK G.P. SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
PIKES PEAK SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
PIKES PEAK WASECA SAND	SOLUTION GAS DRIVE	CYCLIC STEAM STIMULATION	1	SE 1/4 OF LSD.
PINTO FROBISHER BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD, EXCEPT: A: TWP 2, RGE 4, SEC: 5; WHERE:
			2	ODD NUMBERED LSD; B: TWP 2, RGE 4, SEC: NW 1/4 OF 2, S 1/2 OF 11; WHERE:
			1	CENTER OF LSD.
PINTO MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: SOUTH PINTO UNIT	2	EVEN NUMBERED LSD, EXCEPT: TWP 2, RGE 4, SEC: 5; WHERE:
			2	ODD NUMBERED LSD.
PLATO NORTH VIKING	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.
PLATO VIKING	SOLUTION GAS DRIVE	WATERFLOOD IN: PLATO VIKING VOLUNTARY UNIT NO. 1	1	CENTER OF LSD.
PLENTY VIKING SAND	SOLUTION GAS DRIVE	NONE	1	CENTER OF LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
PLOVER LAKE BAKKEN SAND	SOLUTION GAS DRIVE	PILOT WATERFLOOD (SUSPENDED)	1	CENTER OF LSD.
PRAIRIEDALE VIKING SAND	SOLUTION GAS DRIVE	NONE	1	CENTRE OF LSD.
QUEENSDALE EAST FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
QUEENSDALE NORTH ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
QUEENSDALE WEST ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
RALPH MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: RALPH MIDALE BEDS VOL. UNIT	2	ODD NUMBERED LSD.
RAPDAN UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: RAPDAN UNIT 2: NORTH RAPDAN UPPER SHAUNAVON VOLUNTARY UNIT 3: RAPDAN UPPER SHAUNAVON VOLUNTARY UNIT NO. 2 PILOT POLYMER FLOOD IN: RAPDAN UNIT	2	EVEN NUMBERED LSD, EXCEPT: A: TWP 3, RGE 20, SEC: NE 1/4 OF 32, NW 1/4 OF 33; TWP 4, RGE 20, SEC: W 1/2 OF 4, E 1/2 OF 5, E 1/2 OF 8, W 1/2 OF 9, SW 1/4 OF 16, SE 1/4 OF 17; WHERE:
			4	NE LSD IN 1/4 SECTION; B: TWP 4, RGE 19, SEC: E 1/2 & NW 1/4 OF 30, 31, 32; TWP 4, RGE 20, SEC: 26, 35, S 1/2 & NE 1/4 OF 36; TWP 5, RGE 19, SEC: 5, W 1/2 & NE 1/4 OF 7, 8; TWP 5, RGE 20, SEC: W 1/2 OF 1, 2, 12; WHERE:
			4	SW LSD IN 1/4 SECTION.
RAPDAN WEST SHAUNAVON	SOLUTION GAS DRIVE	NONE	4	NE LSD OF 1/4 SECTION.
RED JACKET GRAVELBOURG	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
RED JACKET SHAUNAVON-GRAVELBOURG	WATER DRIVE	NONE	1	CENTER OF LSD.
ROCANVILLE BAKKEN SAND	PARTIAL WATER DRIVE	NONE	1	CENTER OF LSD.
RONCOTT BAKKEN SAND	SOLUTION GAS DRIVE	NONE	2	ODD NUMBERED LSD.
ROSEBANK ALIDA BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD, EXCEPT: A: TWP 4, RGE 32, SEC: LSDS 15,16 & NW 1/4 OF 28, LSDS 7, 8 & NE 1/4 OF 29, LSDS 1 & 2 OF 32, 33, LSDS 13 & 14 OF 34; TWP 5, RGE 32, SEC: W 1/2 & NE 1/4 OF 3, E 1/2 & SW 1/4 OF 4, SW 1/4 OF 10; WHERE:
			1	CENTER OF LSD; B: TWP 5, RGE 32, SEC: NE 1/4 OF 5; WHERE:
			4	CENTER OF DRAINAGE UNIT.
ROSEBANK SOUTH ALIDA BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
RUSH LAKE MANNVILLE SANDS	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
RUSH LAKE SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
RUSH LAKE WASECA SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
SALT LAKE LLOYDMINSTER SAND	SOLUTION GAS DRIVE	WATERFLOOD	1	SE 1/4 OF LSD.
SENLAC LLOYDMINSTER SAND	SOLUTION GAS DRIVE	PILOT WATERFLOOD	1	SE 1/4 OF LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
SHERWOOD FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD, EXCEPT: TWP 1, RGE 31, SEC: LSDS 1,2,3 & 4 OF 6, TWP 1, RGE 32, SEC: LSDS 1,2,3 & 4 OF 1, LSDS 1,2,3 & 4 OF 2; WHERE:
			1	CENTRE OF LSD.
SILVERDALE SPARKY SAND	SOLUTION GAS DRIVE	PILOT WATER ALTERNATING GAS INJECTION	1/4	CENTER OF EACH 1/4 LSD, EXCEPT: A: TWP 49, RGE 26, SEC: LSDS 3,6,11,14 & E 1/2 OF 14, LSDS 3,6,11,14 & SE 1/4 OF 23; WHERE:
			1	CENTRE OF LSD; B: TWP 49, RGE 27, SEC: N 1/2 OF 6; TWP 48, RGE 26, SEC: LSDS 4,5,12 & 13 OF 14, LSDS 1,8,9 & 16 OF 15, LSDS 1,8,9 & 16 OF 22, LSDS 4,5,12 & 13 OF 23, LSDS 1,8,9 & 16 OF 27, LSDS 1,8,9 & 16 OF 34; TWP 49, RGE 26, SEC: LSDS 1,8,9, & 16 OF 3, LSDS 1,8,9 & 16 OF 10, LSDS 1,8,9 & 16 OF 15; WHERE: SPECIAL PROVISIONS FOR PARTIAL SECTIONS.
SILVERTON FROBISHER BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
SKINNER LAKE RATCLIFFE BEDS	SOLUTION GAS DRIVE	NONE	4	NW LSD OF 1/4 SECTION.
SMILEY-DEWAR VIKING	SOLUTION GAS DRIVE	WATERFLOOD	1	CENTER OF LSD.
SOURIS FLAT FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
SOUTH FLETWODE TILSTON BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
SOUTH SUCCESS ROSERAY SAND	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	WATERFLOOD IN: SUCCESS UNIT	1	SW 1/4 OF LSD.
STANDARD HILL WASECA SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
STAR VALLEY FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
STEELMAN FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
STEELMAN MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: STEELMAN UNIT NO. 1A 2: STEELMAN UNIT NO. 2 3: STEELMAN UNIT NO. 3 4: STEELMAN UNIT NO. 4 5: STEELMAN UNIT NO. 5 6: STEELMAN UNIT NO. 6 7: STEELMAN UNIT NO. 7 8: LAMPMAN UNIT 9: DOUGLASTON MIDALE BEDS UNIT 10: STEELMAN NORTH MIDALE VOLUNTARY UNIT NO. 1 11: STEELMAN NORTH MIDALE VOLUNTARY UNIT NO. 2	2	ODD NUMBERED LSD.
STORTHOAKS ALIDA-TILSTON BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
STOUGHTON FROBISHER-ALIDA BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
STOUGHTON SOUTH FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
SUCCESS NORTH ROSERAY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: SUCCESS NORTH ROSERAY VOLUNTARY UNIT	1	CENTER OF LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
SUCCESS ROSERAY SAND ALPHA	SOLUTION GAS DRIVE	WATERFLOOD IN: SUCCESS ALPHA UNIT	1	SW 1/4 OF LSD.
SUFFIELD ROSERAY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: SUFFIELD UNIT NO. 1 2: SUFFIELD UNIT NO. 3	2	ODD NUMBERED LSD, EXCEPT: TWP 14, RGE 19, SEC: 17, E 1/2 & NW 1/4 OF 18, S 1/2 OF 19, S 1/2 OF 20; WHERE:
			1	CENTER OF LSD.
SUFFIELD UPPER SHAUNAVON	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: SUFFIELD UNIT NO. 2 2: SUFFIELD UNIT NO. 3	2	ODD NUMBERED LSD.
TABLELAND WINNIPEGOSIS	SOLUTION GAS DRIVE	WATERFLOOD IN: TABLELAND VOL. UNIT NO. 1	4	SE LSD OF 1/4 SECTION.
TANGLEFLAGS EAST MCLAREN SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS G.P. SAND	SOLUTION GAS DRIVE	PILOT IN-SITU WET COMBUSTION (SUSPENDED)	1	SE 1/4 OF LSD.
TANGLEFLAGS LLOYDMINSTER SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: TANGLEFLAGS VOL. UNIT NO. 2	1	SE 1/4 OF LSD.
TANGLEFLAGS MANNVILLE SANDS	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS MCLAREN SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS NORTH G.P. SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS NORTH LLOYD/ CUMMINGS SAND	SOLUTION GAS DRIVE	STEAMFLOOD/HORIZONTAL WELLS	1	SE 1/4 OF LSD.
TANGLEFLAGS SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS WEST G.P. SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS WEST LLOYD. SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS WEST MANNVILLE SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS WEST MCLAREN SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TANGLEFLAGS WEST SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
TATAGWA MIDALE BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD, EXCEPT: TWP 5, RGE 15, SEC: LSDS 7 & 8 OF 32, LSDS 5,6,11 & 12 OF 33; WHERE:
			1	CENTER OF LSD.
TATAGWA NORTH MIDALE BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
VERENDRYE VIKING SAND	SOLUTION GSA DRIVE	NONE	1	CENTER OF LSD.
VERLO ROSERAY SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: VERLO ROSERAY SAND UNIT	2	EVEN NUMBERED LSD.
VIEWFIELD FROBISHER BEDS	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	WATERFLOOD IN: VIEWFIELD VOL. UNIT NO. 1	1	CENTER OF LSD.
VIEW HILL MIDALE BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
WAPELLA SAND	WATER DRIVE	NONE	1	CENTER OF LSD.
WARMLEY ALIDA BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
WAUCHOPE ALIDA-TILSTON BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
WAUCHOPE NORTH TILSTON BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
WEIR HILL FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
WEST INNES FROBISHER BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.

DEVELOPMENT DATA - OIL POOLS

POOL NAME	NATURAL DEPLETION MECHANISM	ENHANCED RECOVERY PROJECTS	SPACING REGULATIONS * DRAINAGE UNITS, LSDS	TARGET AREA
WEST KINGSFORD MIDALE BEDS	WATER DRIVE	NONE	2	ODD NUMBERED LSD.
WESTHAZEL G.P. SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
WESTHAZEL SPARKY SAND	SOLUTION GAS DRIVE	NONE	1	SE 1/4 OF LSD.
WEYBURN FROBISHER BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD, EXCEPT: SEE: WEYBURN MIDALE BEDS.
WEYBURN MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: WEYBURN UNIT 2: WEYBURN MIDALE VOL. UNIT NO. 2 3: WEYBURN MIDALE VOL. UNIT NO. 3 4: WEYBURN MIDALE VOL. UNIT NO. 4 5: WEYBURN MIDALE VOL. UNIT NO. 5 6: WEYBURN MIDALE VOL. UNIT NO. 6 7: WEYBURN MIDALE VOL. UNIT NO. 7	2	EVEN NUMBERED LSD, EXCEPT: TWP 6, RGE 11, SEC: W 1/2 OF 31; TWP 7, RGE 11, SEC: 5, 6, 7, 8; TWP 5, RGE 12, SEC: NW 1/4 OF 35; TWP 6, RGE 12, SEC: LSDS 13 & 14 OF 1, NE 1/4 & W 1/2 & LSDS 7 & 8 OF 2, 11, W 1/2 OF 12, 13, 14, NE 1/4 OF 22, 23, 24, 25, 26, 27, 33, 34, 35, 36; TWP 7, RGE 12, SEC: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, W 1/2 OF 14, 15, 16, 17, 18, 19, 20, 21, 22, W 1/2 OF 23; TWP 7, RGE 13, SEC: E 1/2 OF 1, E 1/2 OF 12, E 1/2 OF 13, E 1/2 OF 24; TWP 6, RGE 14, SEC: 26, 33; TWP 7, RGE 14, SEC: N 1/2 OF 2, 3, 4, 10, 11, W 1/2 OF 12; WHERE:
			2	ODD NUMBERED LSD.
WHITE BEAR TILSTON BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
WHITE BEAR TILSTON-SOURIS VALLEY BEDS	WATER DRIVE	NONE	1	CENTER OF LSD.
WHITEMUD SHAUNAVON	SOLUTION GAS DRIVE	NONE	4	NE LSD OF 1/4 SECTION.
WHITESIDE VIKING SAND	SOLUTION GAS DRIVE	WATERFLOOD IN: WHITESIDE VIKING VOL. UNIT	1	CENTER OF LSD.
WILDWOOD ALIDA BEDS	WATER DRIVE	NONE	2	EVEN NUMBERED LSD.
WILLMAR FROBISHER-ALIDA BEDS	WATER DRIVE SOLUTION GAS DRIVE PARTIAL WATER DRIVE	WATERFLOOD IN: 1: WILLMAR FROBISHER-ALIDA VOLUNTARY UNIT NO. 1 2: NORTH DALESBORO UNIT NO. 1 3: NORTH CENTRAL WILLMAR VOLUNTARY UNIT	2	EVEN NUMBERED LSD, EXCEPT: TWP 5, RGE 2, SEC: 31, 32, N 1/2 OF 33, NW 1/4 OF 34; TWP 6, RGE 2, SEC: SW 1/4 OF 3, S 1/2 OF 4, 6, S 1/2 & NE 1/4 OF 7, SW 1/4 OF 8; TWP 5, RGE 3, SEC: NE 1/4 OF 25, 35, 36; TWP 6, RGE 3, SEC: 1, S 1/2 & NE 1/4 OF 2, SE 1/4 OF 12; WHERE:
			1	CENTER OF LSD.
WINMORE FROBISHER BEDS	SOLUTION GAS DRIVE PARTIAL WATER DRIVE	NONE	2	ODD NUMBERED LSD.
WINTER CUMMINGS SAND	SOLUTION GAS DRIVE	HORIZONTAL WELLS	1	CENTER OF LSD.
WORDSWORTH FROBISHER-ALIDA BEDS	SOLUTION GAS DRIVE	NONE	2	ODD NUMBERED LSD.
WORKMAN FROBISHER BEDS	SOLUTION GAS DRIVE WATER DRIVE	WATERFLOOD IN: WORKMAN FROBISHER VOLUNTARY UNIT NO. 1	2	ODD NUMBERED LSD.
WORKMAN MIDALE BEDS	SOLUTION GAS DRIVE	WATERFLOOD IN: 1: WORKMAN MIDALE VOL. UNIT NO. 1 2: WORKMAN MIDALE VOL. UNIT NO. 2	2	ODD NUMBERED LSD.

* SPACING REGULATIONS IN EFFECT ON JANUARY 1,1989.

GAS POOL DEVELOPMENT DATA

POOL NAME	SPACING REGULATIONS * DRAINAGE UNIT SECTIONS	TARGET AREA
BAYHURST VIKING GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
BAYHURST WEST VIKING GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
BEACON HILL MANNVILLE SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
BEACON HILL WEST MANNVILLE SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
BEVERLEY EAST CANTUAR GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
BIGSTICK SECOND WHITE SPECKS GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
BROCK EAST VIKING GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
BROCK VIKING SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
BRONSON LAKE COLONY SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
BRONSON LAKE WASECA SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
BURSTALL MEDICINE HAT SAND GAS POOL	1/4	NORTHEAST CORNER OF DRAINAGE UNIT.
BURSTALL MILK RIVER GAS POOL	1/4	NORTHEAST CORNER OF DRAINAGE UNIT.
BURSTALL MILK RIVER-MEDICINE HAT GAS POOL	1/4	NORTHEAST CORNER OF DRAINAGE UNIT.
BURSTALL NORTH VIKING SAND GAS	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
CAVALIER SPINNEY HILL SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
COLEVILLE-SMILEY VIKING SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
CRANE LAKE MILK RIVER GAS POOL		
CRANE LAKE SOUTH MILK RIVER GAS POOL		
CRANE LAKE SOUTH SECOND WHITE SPECKS GAS POOL		
DODSLAND NORTH VIKING GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
DRIVER BAKKEN SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
DRIVER MANNVILLE SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
FORT PITT MANNVILLE SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
FORT PITT NORTH COLONY SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
FORT PITT NORTH WASECA SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
FREEFIGHT MILK RIVER GAS POOL	1/4	NORTHEAST CORNER OF DRAINAGE UNIT.
GLIDDEN VIKING GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
GREENAN VIKING GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
GULL LAKE CANTUAR GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
HATTON MEDICINE HAT SAND GAS POOL	1 1/4, 1/2	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE). SEE POOL REGULATIONS FOR DETAILS.
HATTON MILK RIVER GAS POOL	1 1/4, 1/2	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE). SEE POOL REGULATIONS FOR DETAILS.
HATTON MILK RIVER-MEDICINE HAT GAS POOL	1 1/4, 1/2	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE). SEE POOL REGULATIONS FOR DETAILS.
HOOSIER VIKING SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
INGEBRIGT MILK RIVER GAS POOL	1/4	NORTHEAST CORNER OF DRAINAGE UNIT.
LIEBENTHAL MILK RIVER GAS POOL	1/4	NORTHEAST CORNER OF DRAINAGE UNIT, EXCEPT: TWP 19, RGE 25, SEC: 1 TO 4, 9 TO 16, 21 TO 28, & 33 TO 36; TWP 20, RGE 25, SEC: 1 TO 4; WHERE: CENTRE OF DRAINAGE UNIT.
LLOYDMINSTER COLONY SAND GAS POOL	1/4	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
LOVERNA NORTH MANNVILLE SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
LOVERNA SOUTH BAKKEN SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
LOVERNA SOUTH VIKING GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
LOVERNA WEST BAKKEN SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE)
MARENGO VIKING GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
MILTON VIKING SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
PIERCELAND MANNVILLE SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
SENATE SECOND WHITE SPECKS GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
SUPERB BAKKEN SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
TANGLEFLAGS COLONY SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
TANGLEFLAGS MCLAREN SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
TANGLEFLAGS SECOND WHITE SPECKS GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).

GAS POOL DEVELOPMENT DATA

POOL NAME	SPACING REGULATIONS * DRAINAGE UNIT SECTIONS	TARGET AREA
TANGLEFLAGS ST. WALBURG SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
TOTNES VIKING GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
WHEAT VALLEY CANTUAR SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
WHITESIDE RIBSTONE CREEK SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
WHITESIDE WEST RIBSTONE CREEK SAND GAS POOL	1	CENTRE OF DRAINAGE UNIT (500 METRES FROM D.U. EDGE).
WHITESIDE WEST VIKING SAND GAS POOL	1/2	NORTHWEST & SOUTHEAST 1/4 OF SECTION, EXCEPT: TWP 30, RGE 28, SEC: 18 & 19; TWP 30, RGE 27, SEC: 13; WHERE : NORTHEAST & SOUTHWEST 1/4 OF SECTION.

* SPACING REGULATIONS IN EFFECT ON JANUARY 1, 1989.

AREA SPACING DESCRIPTION*

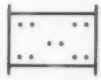
SPACING AREA	DRAINAGE UNIT SIZE (No. of Lsds)	TARGET AREA	EXCEPTIONS
		- OIL AREAS -	
A	2	Odd numbered Lsds.	A well greater than 1 1/2 miles from a producer in the same zone may be drilled on the even or odd Lsd.
B	2	Even numbered Lsds.	A well greater than 1 1/2 miles from a producer in the same zone may be drilled on the even or odd Lsd.
C	4	Any quadrant of a quarter section.	Wells drilled within a 9 section square area centred on the section of an existing oil well shall take on the spacing of this existing well. Wells drilled within a 9 section square area centred on the section of an existing well in an established oil pool shall take on the spacing of this pool.
D	2	Odd or even Lsds.	Wells drilled within a 9 section square area centred on the section of an existing oil well shall take on the spacing of this existing well. Wells drilled within a 9 section square area centred on the section of an existing well in an established oil pool shall take on the spacing of this pool.
E	1	Southeast quadrant of the Lsd.	Wells drilled within a corridor of 1609 metres around an established oil pool shall take on the spacing of this pool. Applies only to wells drilled within the Mannville Group, Detrital, Bakken or Birdbear Formations.
		- GAS AREAS -	
G	16	Odd or even Lsds.	Wells drilled within a 9 section square area centred on a section that contains a gas well shall be drilled at least 500 metres from the sides of the drainage unit. Applies only to Mannville Formation.

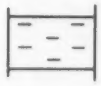
* See the Oil and Gas Conservation Act & Regulations Thereunder for complete area spacing regulations.

TYPICAL WELL LOGS

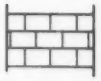
OF PRODUCING ZONES

LITHOLOGY LEGEND

Silt 

Shale 

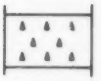
Sandstone

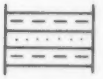
Limestone 

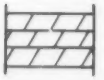
Calcareous shale

Argillaceous sandstone

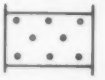
Coal

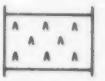
Chert pebbles 

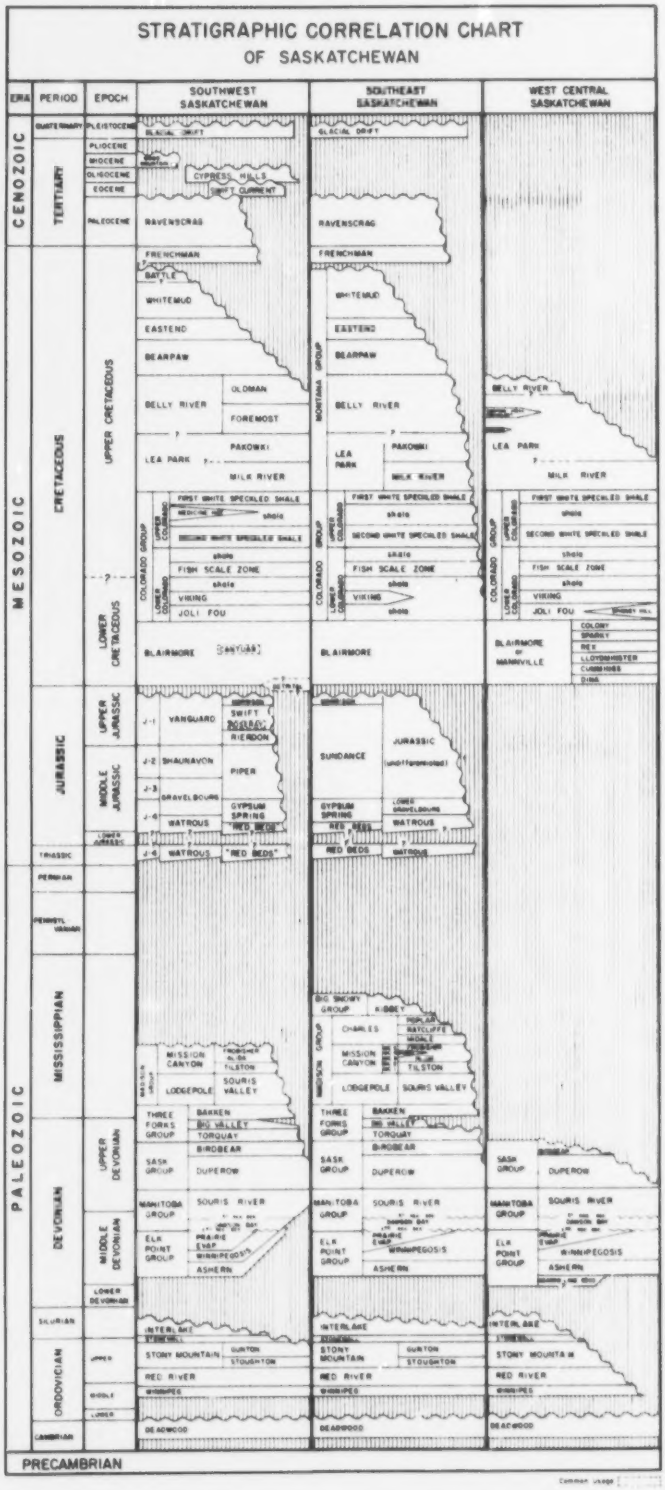
Interbedded shale and sandstone 

Dolomite or dolomitic limestone 

Argillaceous and anhydritic dolomite

Oolitic 

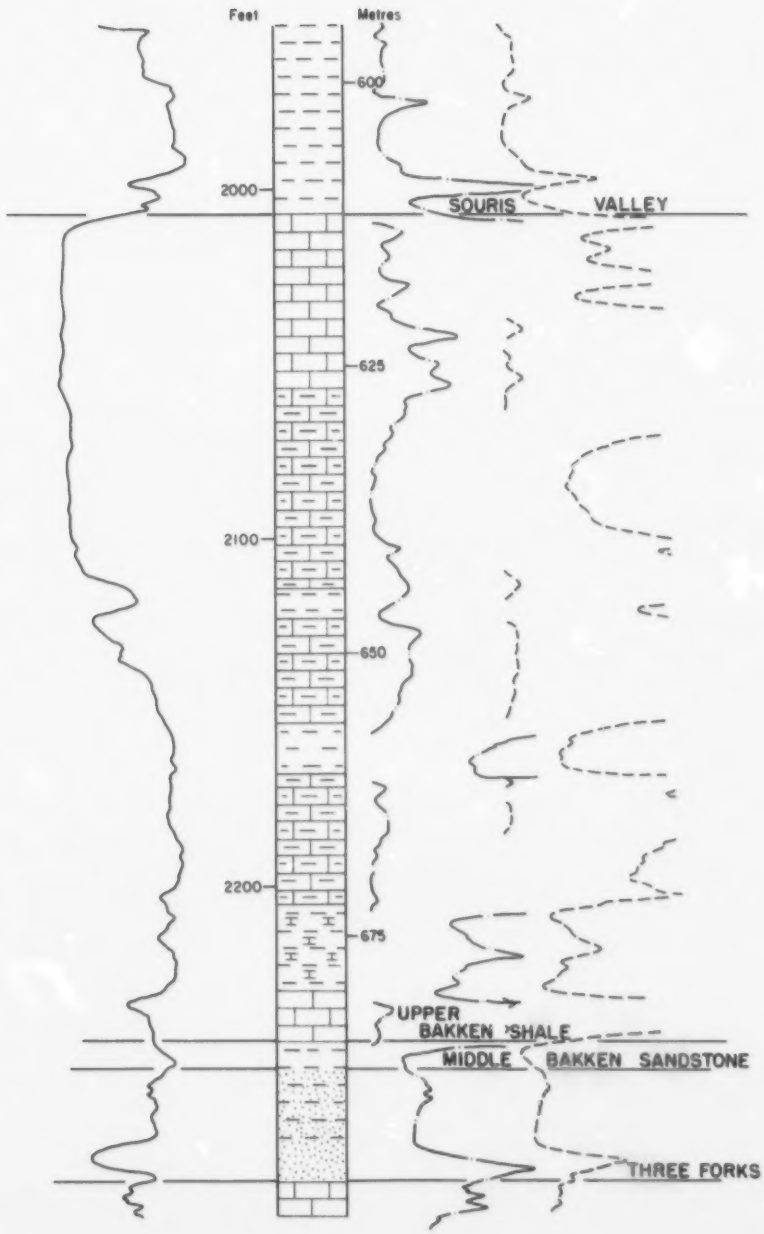
Anhydrite 


STRATIGRAPHIC CORRELATION CHART
OF SASKATCHEWAN
ERA
PERIOD
EPOCH
SOUTHWEST SASKATCHEWAN
SOUTHEAST SASKATCHEWAN
WEST CENTRAL SASKATCHEWAN
CENOZOIC
MESOZOIC
PALEOZOIC
PRECAMBRIAN
QUATERNARY
PLEISTOCENE
TERTIARY
PLIOCENE
MIOCENE
OLIGOCENE
EOCENE
PALEOCENE
CRETACEOUS
UPPER CRETACEOUS
LOWER CRETACEOUS
JURASSIC
UPPER JURASSIC
MIDDLE JURASSIC
LOWER JURASSIC
TRIASSIC
PERMIAN
PENNSYLVANIAN
MISSISSIPPIAN
DEVONIAN
UPPER DEVONIAN
MIDDLE DEVONIAN
LOWER DEVONIAN
SILURIAN
ORDOVICIAN
CAMBRIAN
GLACIAL DRIFT
CYPRESS HILLS
FRENCHMAN
RAVENSCRAG
BATTLE
WHITEMUD
EASTEND
BEARPAW
BELLY RIVER
OLDMAN
FOREMOST
LEA PARK
PAKOWKI
MILK RIVER
COLORADO GROUP
FIRST WHITE SPECKLED SHALE
SECOND WHITE SPECKLED SHALE
FISH SCALE ZONE
VIKING
JOLI FOU
BLAIRMORE
SWIFT
RIERDON
VANGUARD
SHAUNAVON
PIPER
GRAVELBOURG
GYPSUM SPRING
WATROUS
"RED BEDS"
SUNDANCE
JURASSIC (undifferentiated)
MISSION CANYON
LODGEPOLE
TILSTON
SOURIS VALLEY
BIG SNOWY GROUP
CHARLES
RATCLIFFE
MIDALE
FROBISHER
THREE FORKS GROUP
BAKKEN
BIG VALLEY
TORQUAY
BIRDBEAR
SASK GROUP
DUPEROW
MANITOBA GROUP
SOURIS RIVER
ELK POINT GROUP
PRAIRIE EVAPORITE
WINNIPEGOSIS
ASHERN
INTERLAKE
STONY MOUNTAIN
GUNTON
STOUGHTON
RED RIVER
WINNIPEG
DEADWOOD
MONTANA GROUP
COLORADO GROUP
UPPER COLORADO GROUP
LOWER COLORADO GROUP
BLAIRMORE or MANNVILLE
COLONY
SPONDYLY
REE
LLOYDMINSTER
CUMMINGS
DINA

HUDSON ROCANVILLE 4-4

4-4-16-31-W1

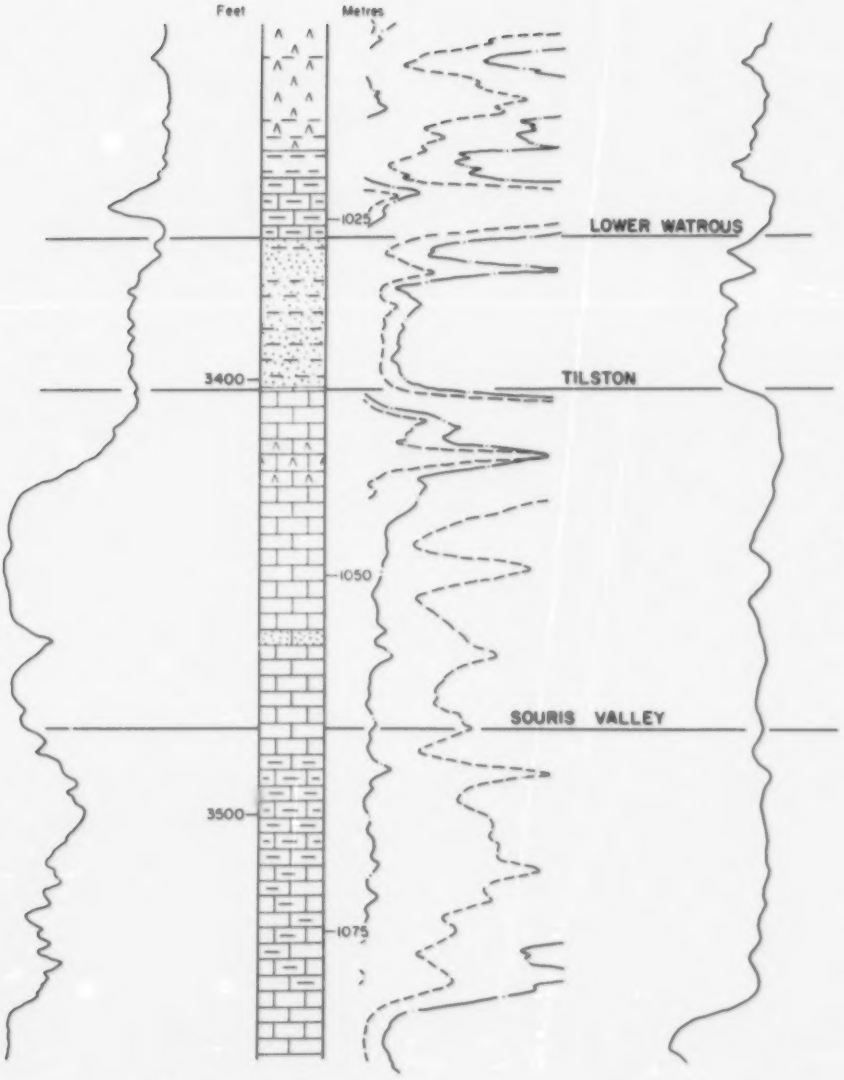
PRODUCING HORIZON : BAKKEN SAND



ROYALITE PARKMAN 2-3

2-3-9-33-W1

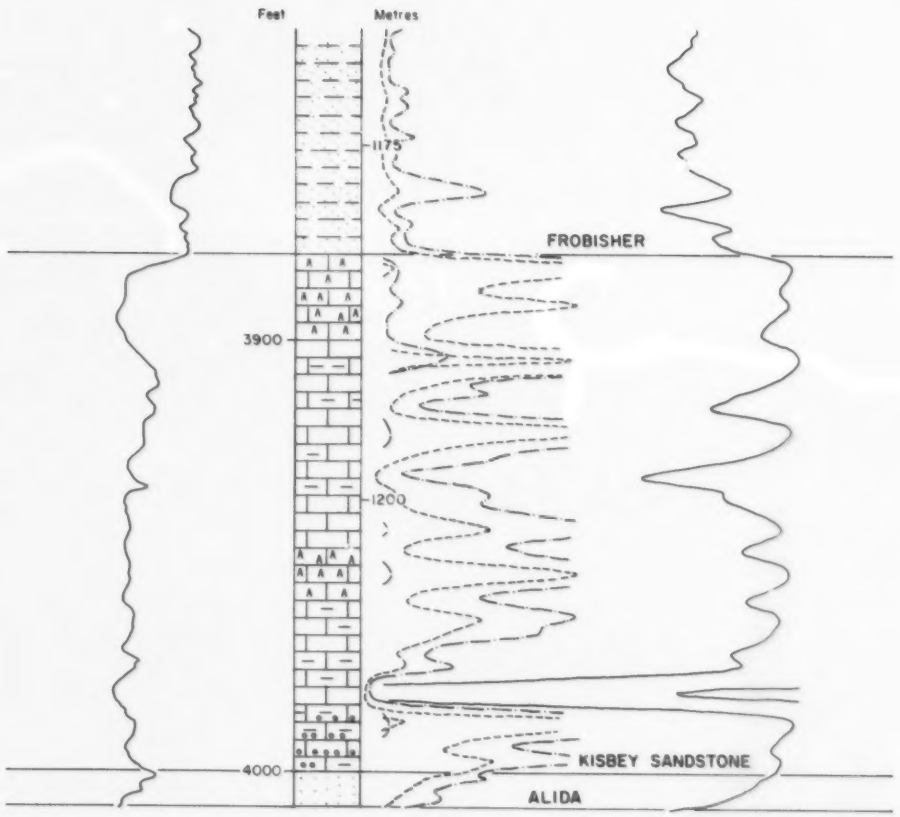
PRODUCING HORIZONS : TILSTON AND SOURIS VALLEY BEDS



MURPHY HASTINGS 7-24-4-34

7-24-4-34-W1

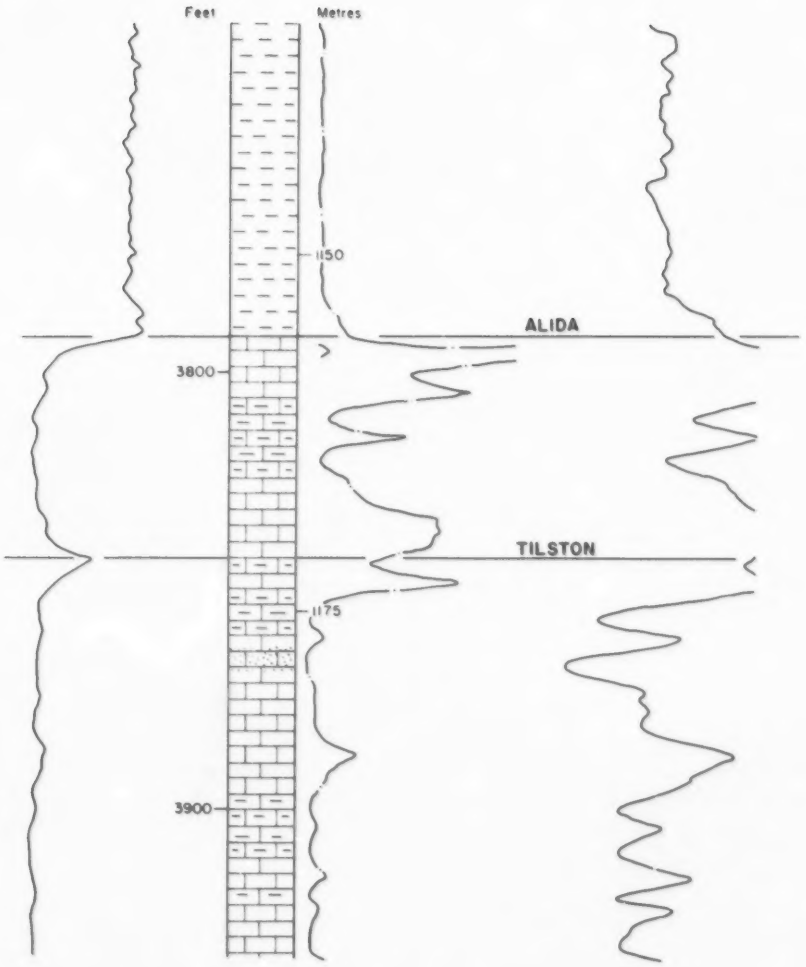
PRODUCING HORIZON : FROBISHER BEDS



SUN QUEENSDALE 2-13-6-1

2-13-6-1-W2

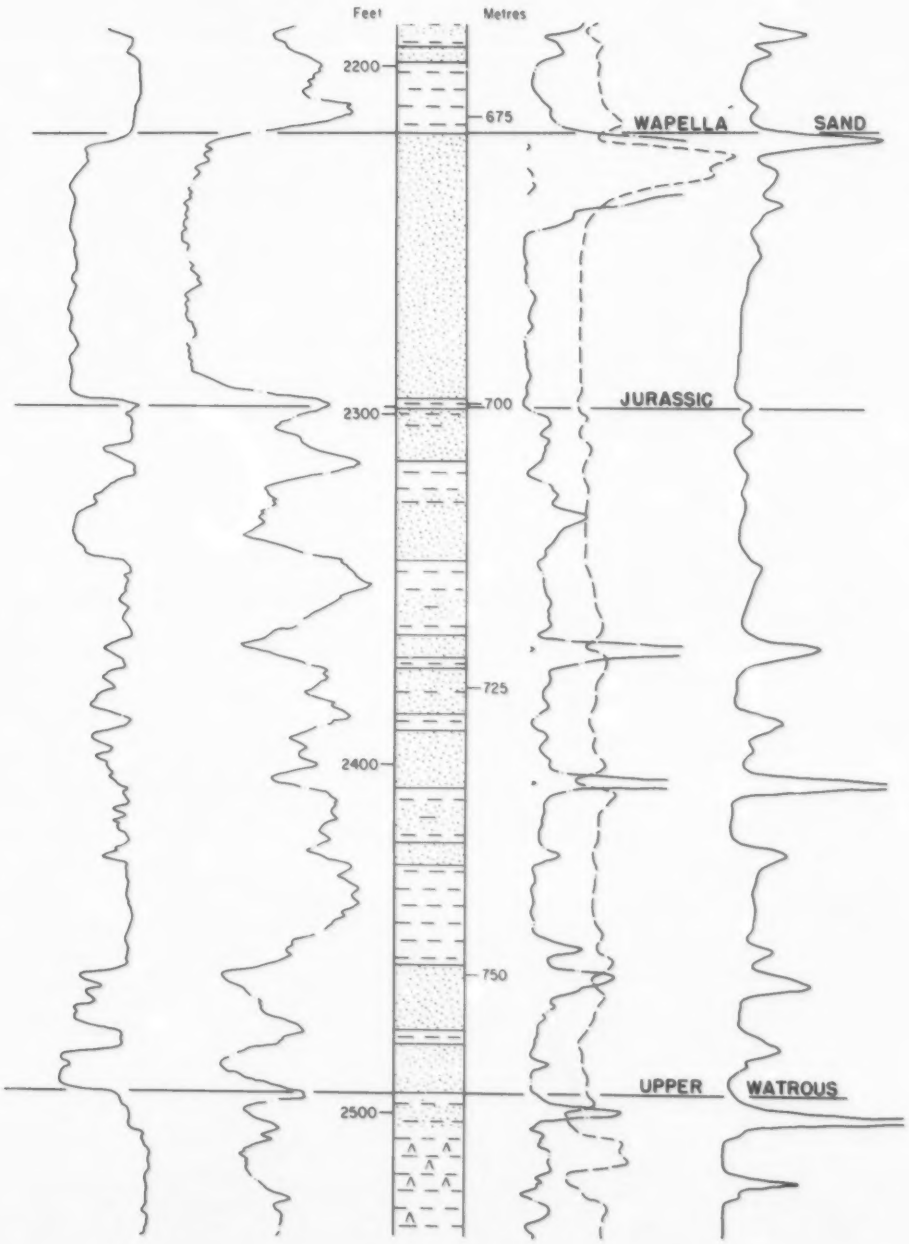
PRODUCING HORIZON : ALIDA BEDS



TIDEWATER WAPELLA 6-33

6-33-14-1-W2

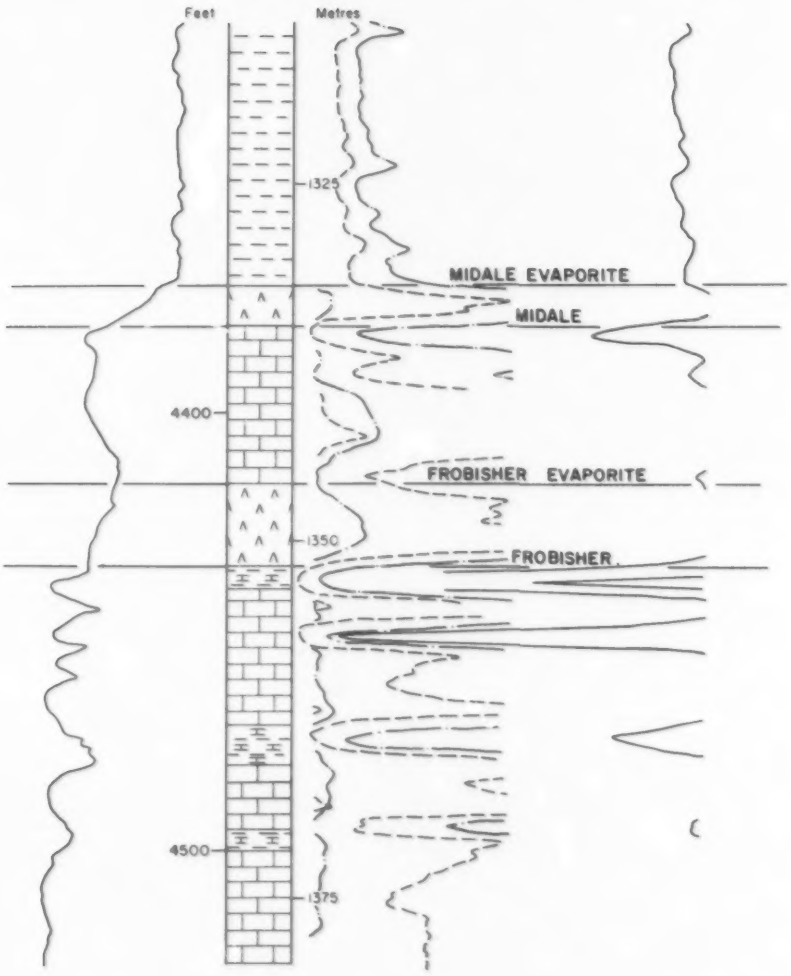
PRODUCING HORIZONS : WAPELLA AND JURASSIC SANDS



PHOENIX et al STEELMAN 5-24-5-6

5-24-5-6-W2

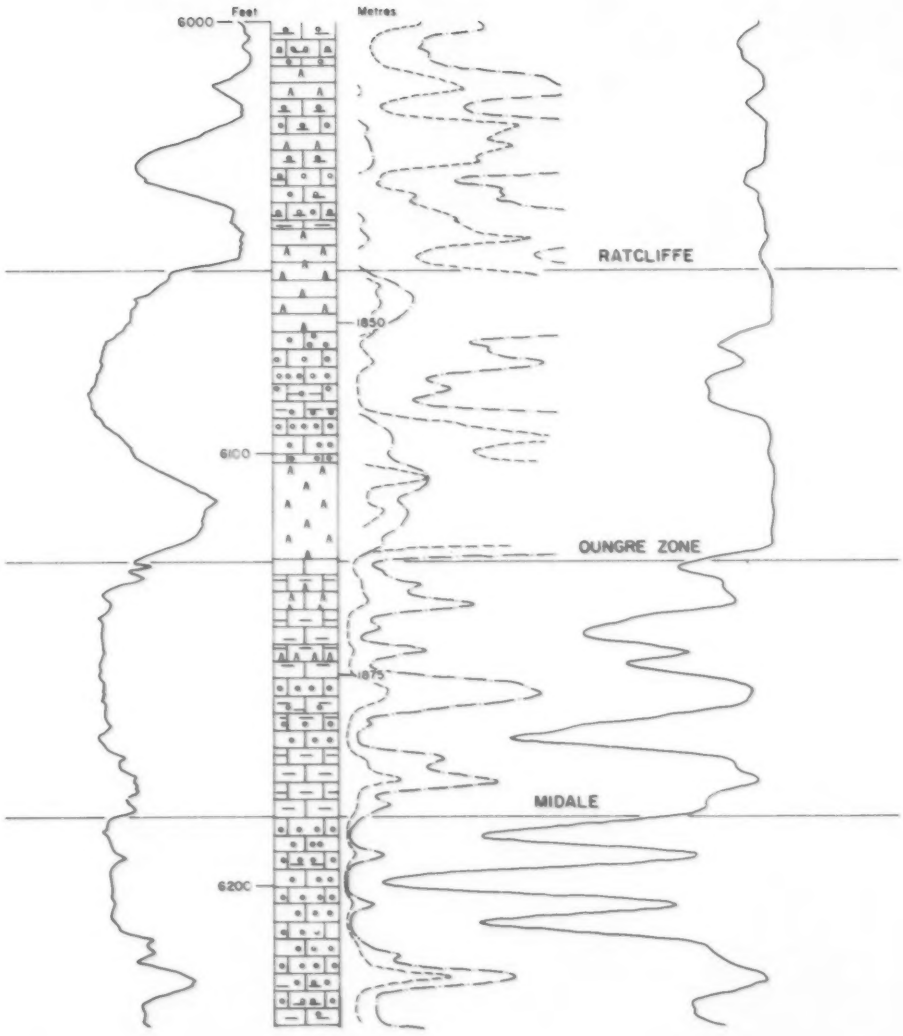
PRODUCING HORIZONS : MIDALE AND FROBISHER BEDS



CNEL CDR OUNGRE 9-24-2-15

9-24-2-15-W2

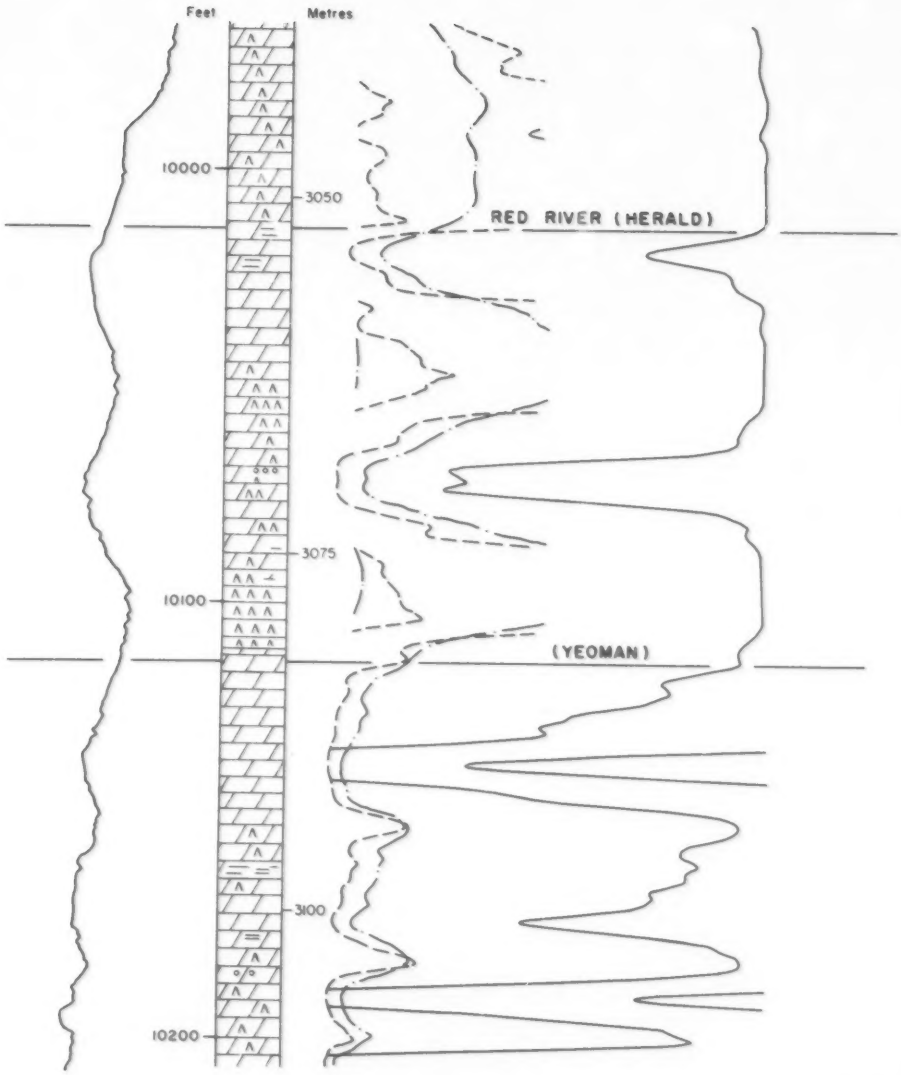
PRODUCING HORIZON : RATCLIFFE BEDS



C.D.R. S LAKE ALMA 1-14-1-17

1-14-1-17-W2

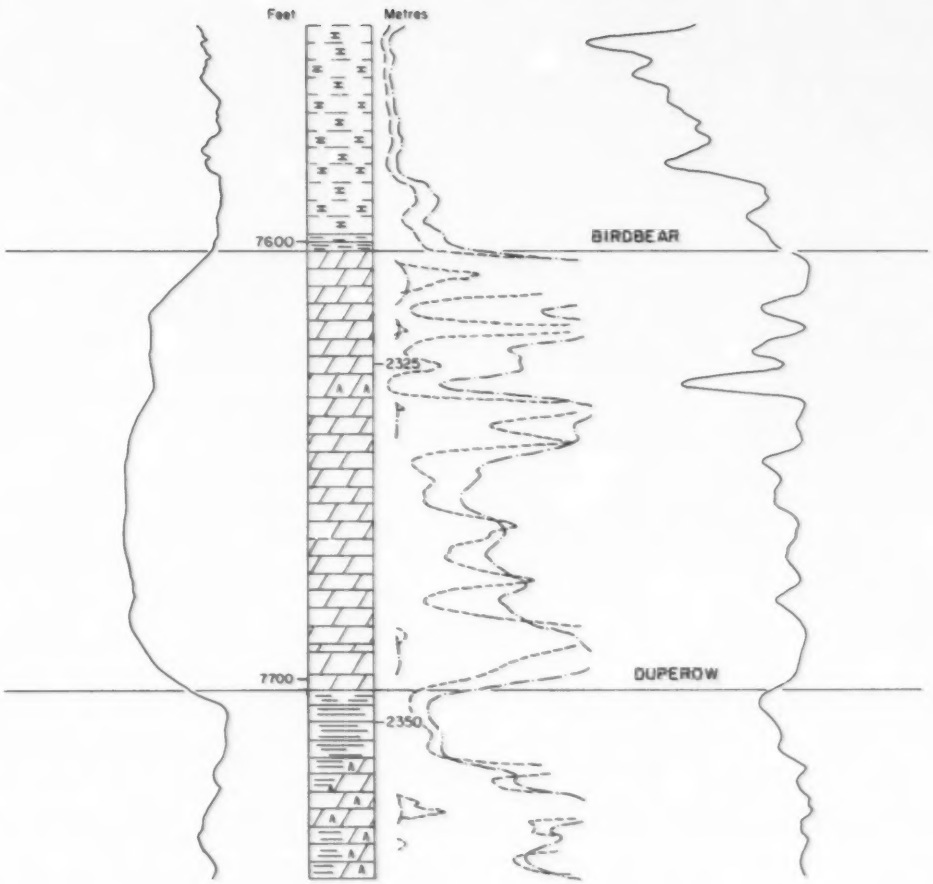
PRODUCING HORIZON : RED RIVER FORMATION



HB MIAMI HUMMINGBIRD 11-26-2-19

11-26-2-19-W2

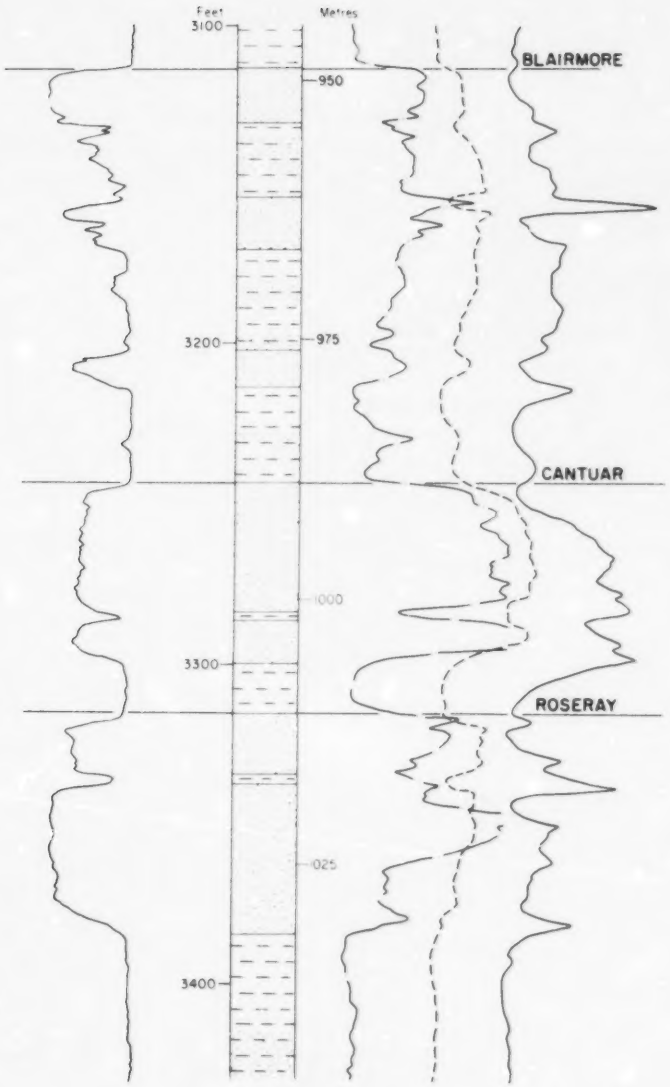
PRODUCING HORIZON : BIRDBEAR FORMATION



M.U.S. CANTUAR 5-2-16-17

5-2-16-17-W3

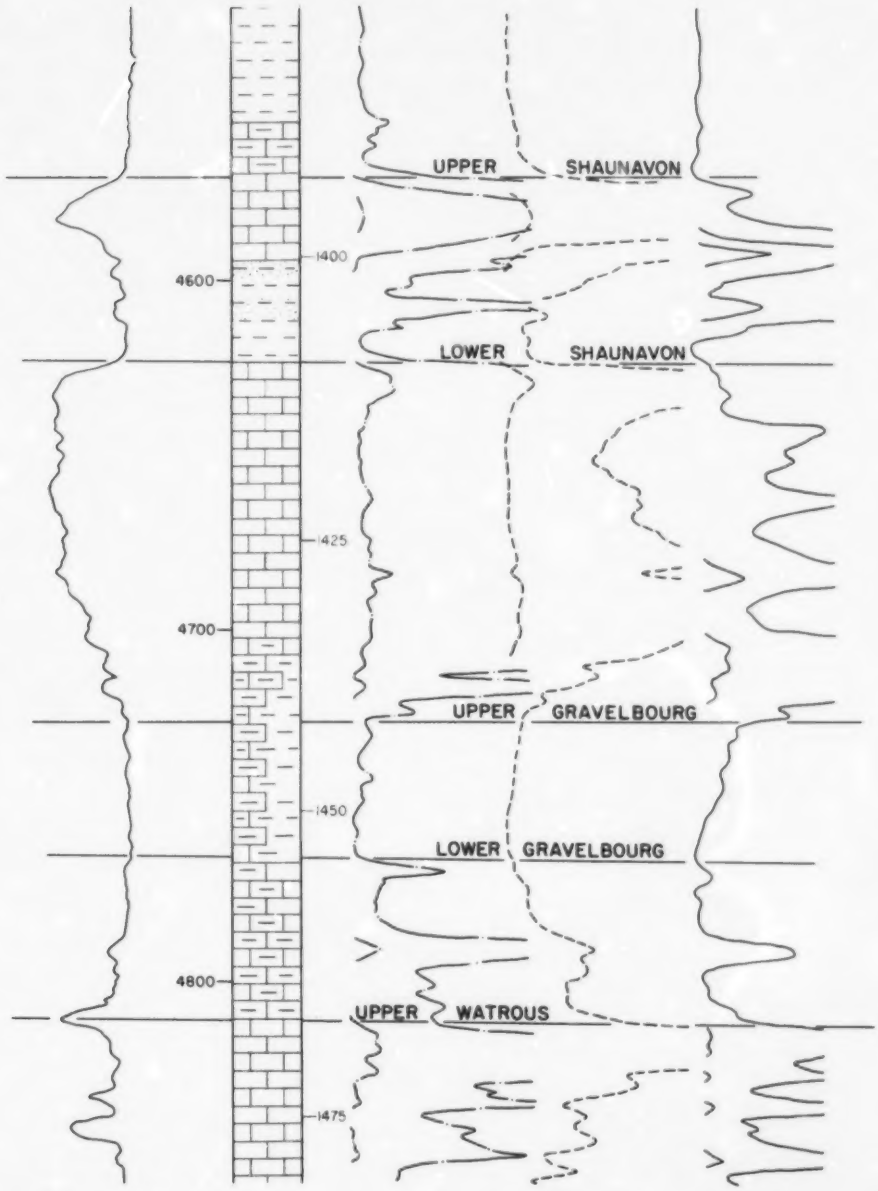
PRODUCING HORIZONS : CANTUAR AND ROSERAY SANDS



TIDEWATER INSTOW CROWN 11-33

11-33-9-18-W3

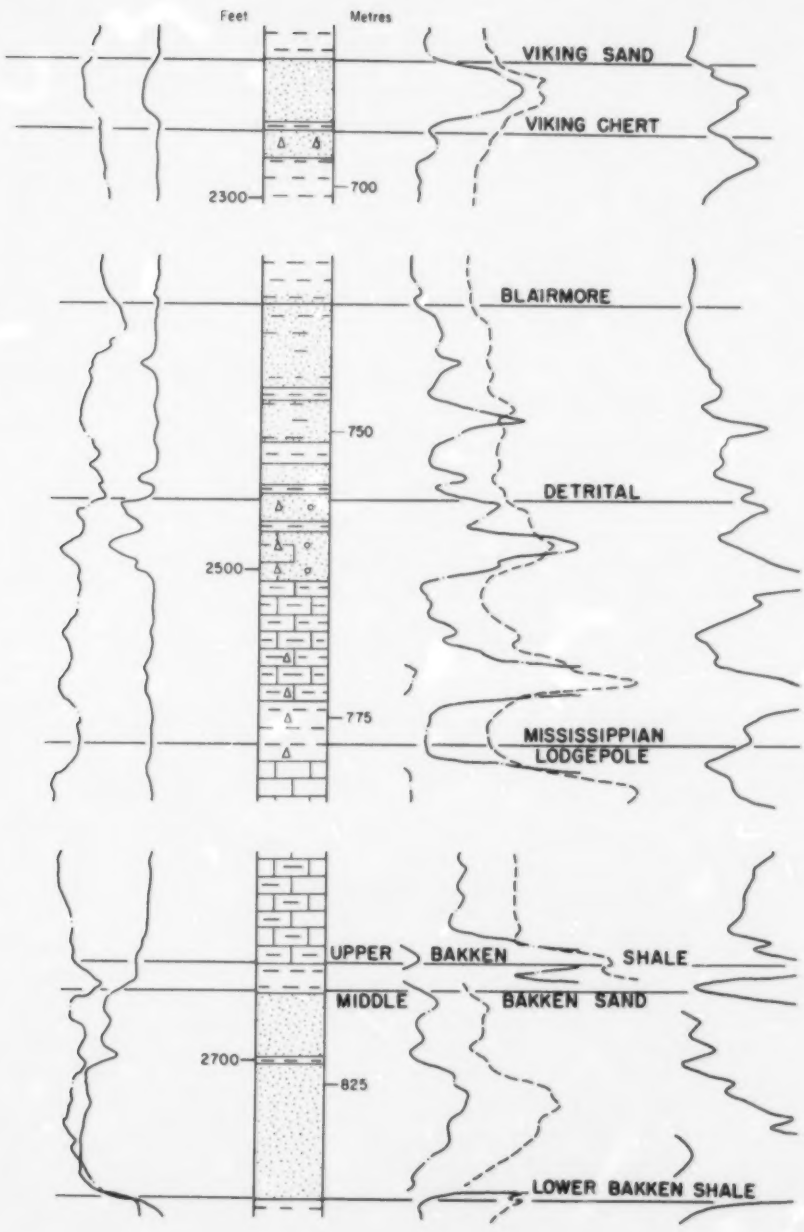
PRODUCING HORIZONS : UPPER AND LOWER SHAUNAVON FORMATIONS



COLEVILLE UNIT 5-30-31-23

5-30-31-23-W3

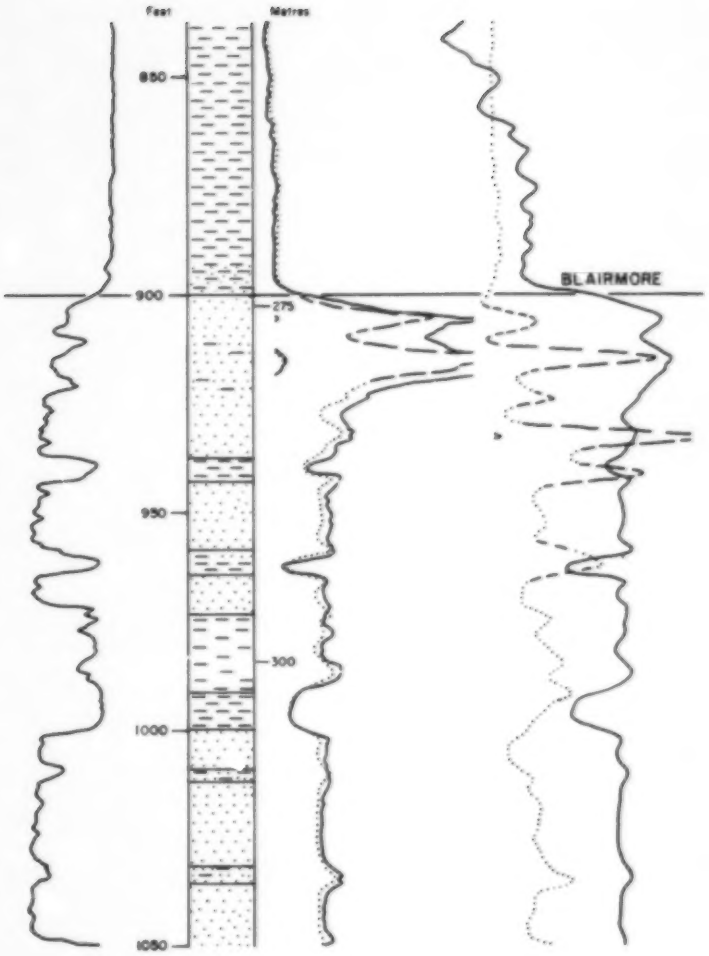
PRODUCING HORIZONS : VIKING AND MIDDLE BAKKEN SANDS



SPC BEACON HILL 10-17-61-24

10-17-61-24-W3

PRODUCING HORIZON : BLAIRMORE



PRECAM ET AL HATTON 11-21-17-25

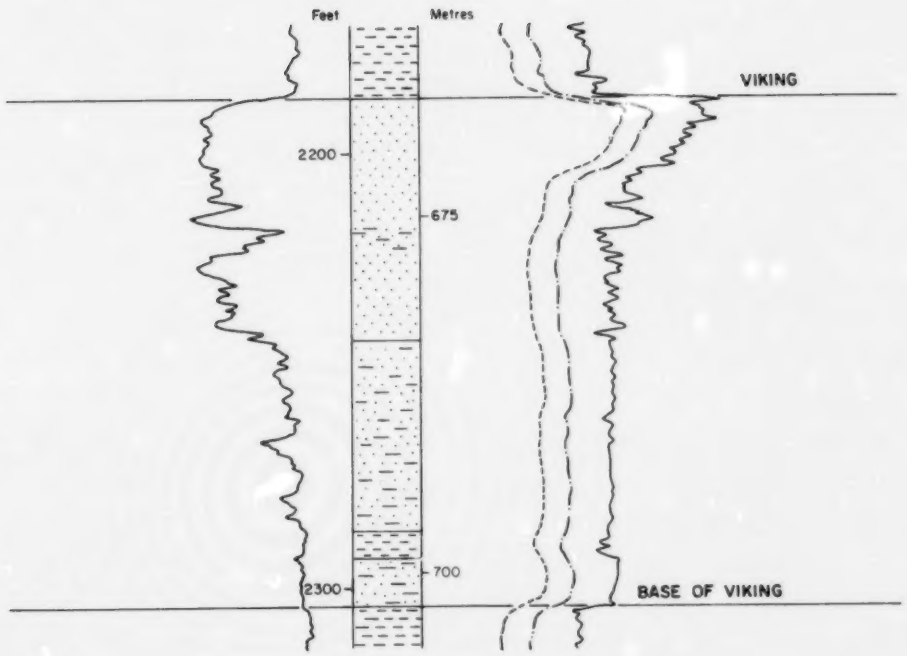
11-21-17-25w3

PRODUCING HORIZON : MILK RIVER SAND

IMP BAYHURST 11-19V-24-25

11-19-24-25-W3

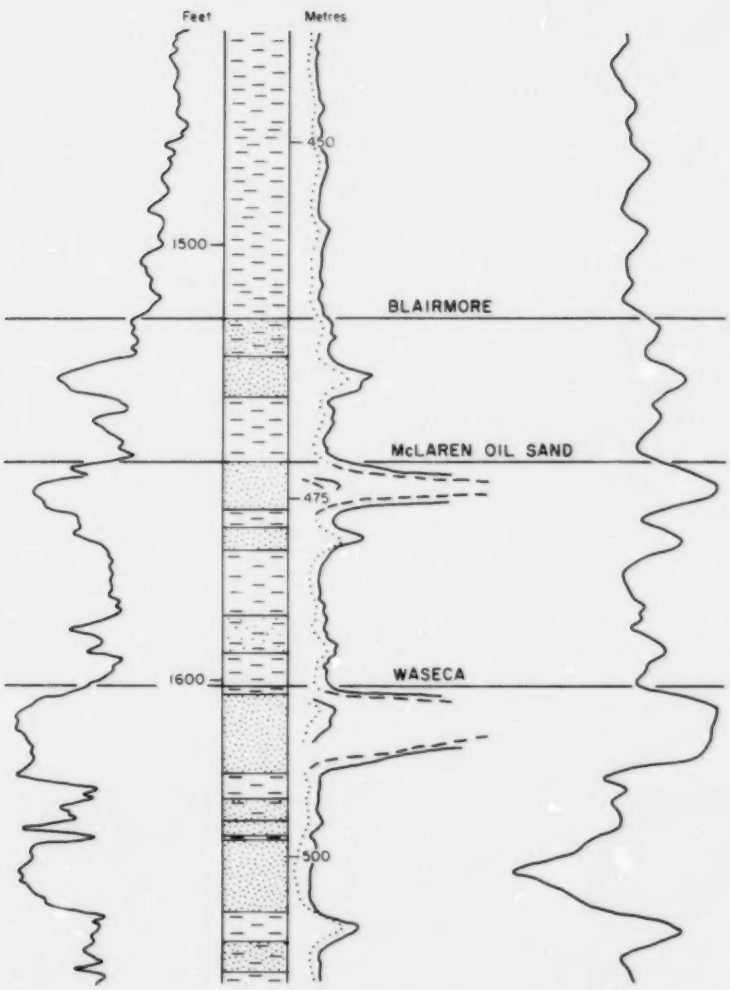
PRODUCING HORIZON : VIKING SAND



HUSKY BIG GULLY C6-27-49-25

C6-27-49-25-W3

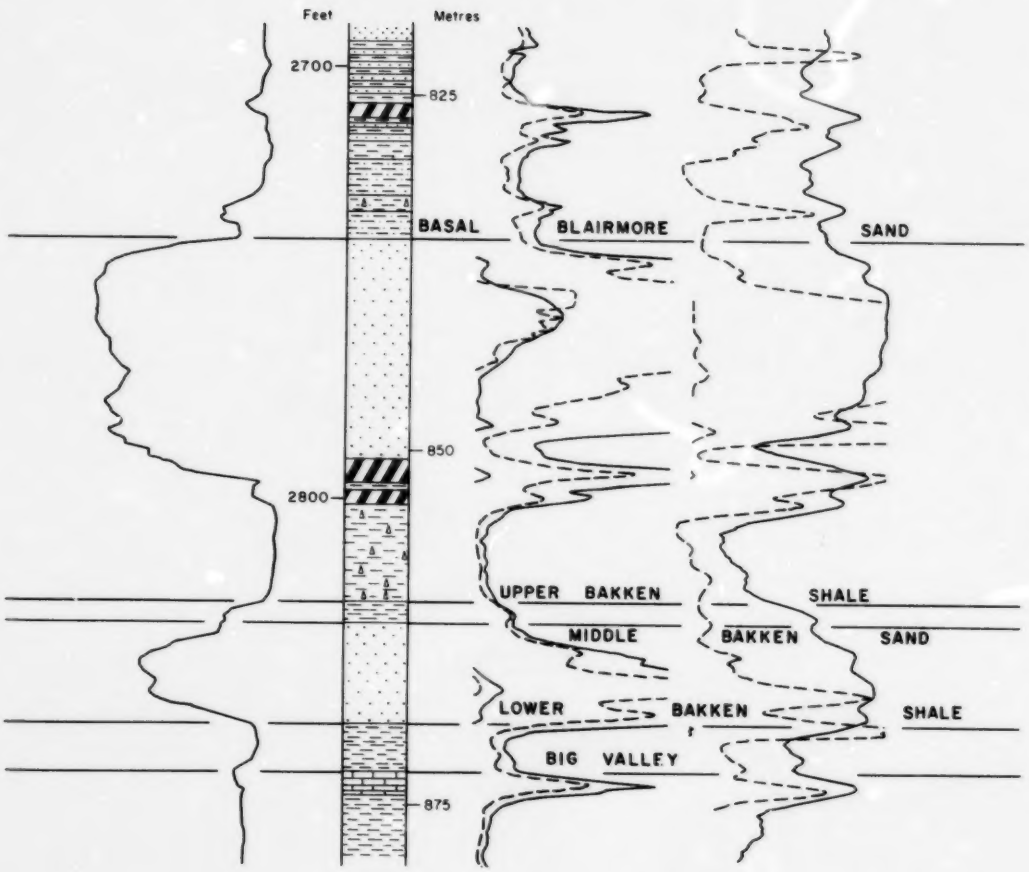
PRODUCING HORIZONS : McLAREN AND WASECA SANDS



HUSKY N. HOOSIER 6-14-32-27

6-14-32-27-W3

PRODUCING HORIZON : BASAL BLAIRMORE

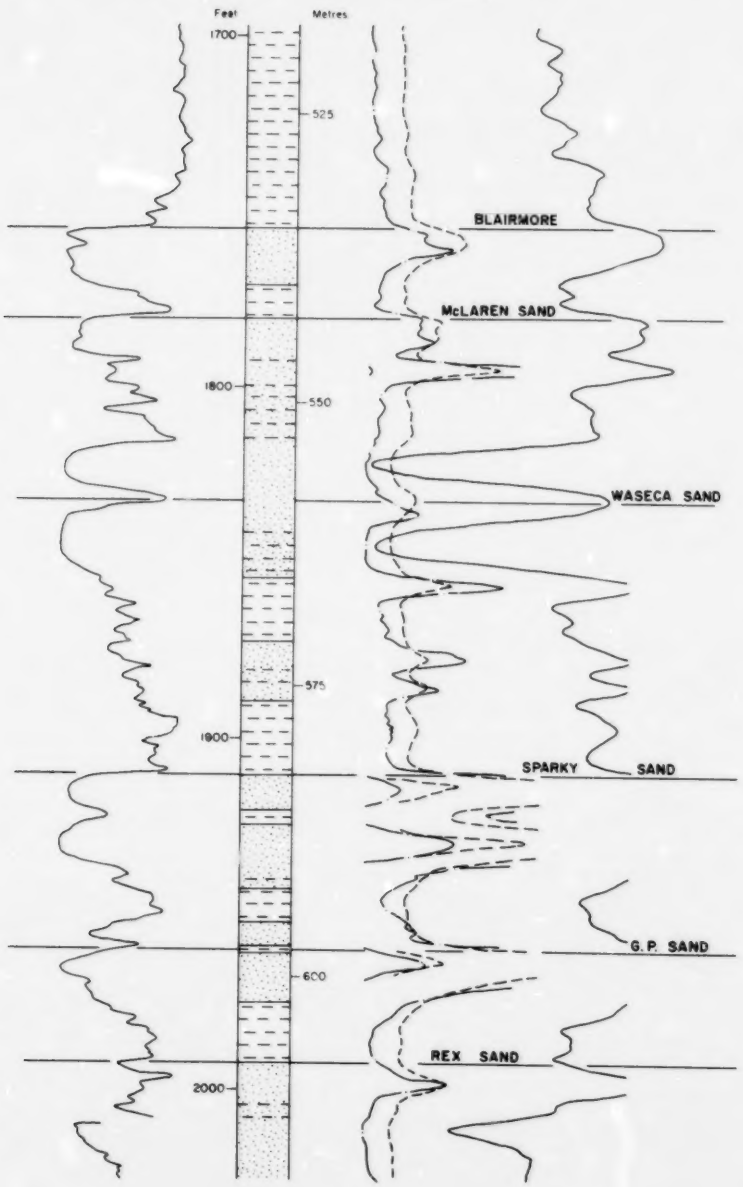


CDN RES EPPING A14-30-47-27

14-30-47-27-W3

PRODUCING HORIZONS : SPARKY & G.P. SANDS

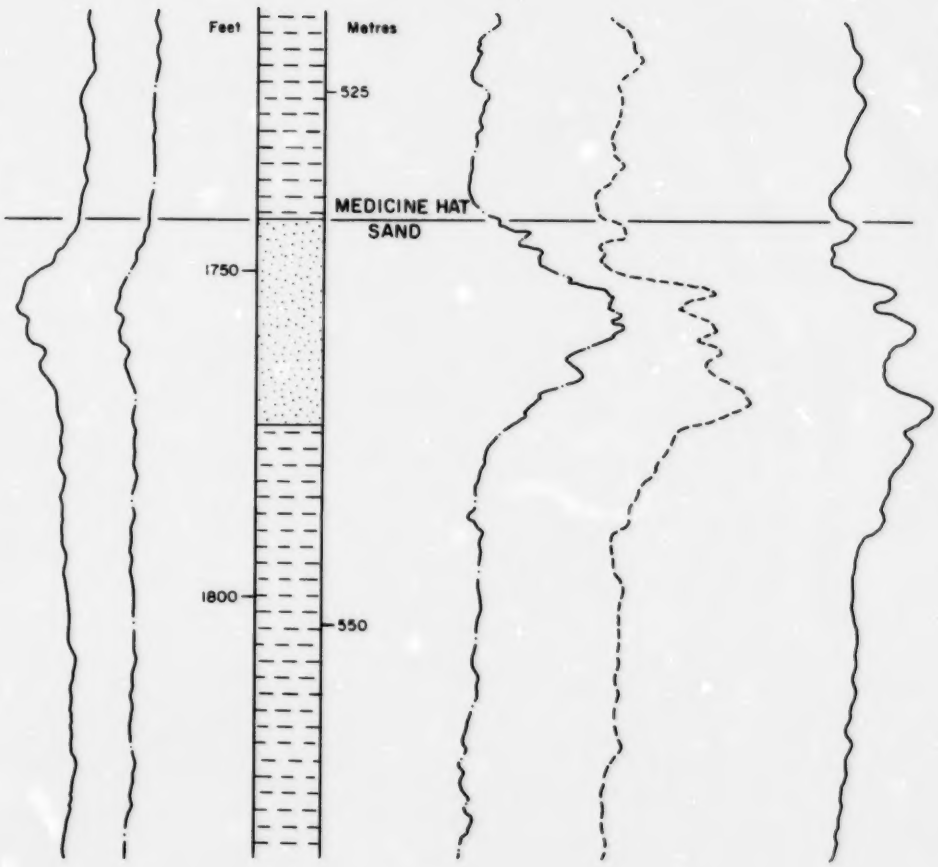
PRODUCING HORIZONS : SPARKY & G.P. SANDS



N C O HORSHAM 10-7-16-29

10-7-16-29-W3

PRODUCING HORIZON : MEDICINE HAT SAND



POOL PRESSURE DATA

INITIAL OIL POOL PRESSURE DATA

POOL NAME	DATUM METRES SUBSEA	PRESSURE GRADIENT kPA/m	TEMPERATURE AT DATUM DEPTH °C	VIRGIN PRESSURE AT DATUM DEPTH MPa	SATURATION PRESSURE
Aberfeldy G.P. Sand	+67.2				
Aberfeldy Sparky Sand	+80.8				
Alameda Midale Beds:					
(Central Group)	792.5	7.24	57	15.39	10.64 MPa @ 57°C
(East Group)	746.8	7.24	57	15.27	10.80 MPa @ 57°C
Alameda West Frobisher Beds	786.6				
Alameda West Midale Beds	765.5				
Alida East Frobisher-Alida Beds	536.4	7.67	44	10.47	10.47 MPa @ 43°C
Alida North Alida Beds	564.8				
Alida West Frobisher-Alida Beds	545.6	7.67	45	10.54	10.54 MPa @ 45°C
Alsask Basal Blairmore Sand	91.4	9.27	33		
Antelope Lake East Roseray Sand	235.6				
Antelope Lake Upper Shaunavon	300.2	8.82	49	10.00	
Arcola Frobisher-Alida Beds	570.0	8.37	53	11.00	8.77 MPa @ 53°C
Auburnton Frobisher-Alida Beds	607.7				
Avon Hill Viking	13.7	8.37	23	6.72	
Baldwinton Sparky Sand	+43.7				
Battle Creek Madison	437.7				
Battle Creek South Upper Shaunavon	385.9				
Battle Creek Upper Shaunavon	375.7				
Battrum East Roseray Sand	193.4				
Battrum North Roseray Sand	172.4				
Battrum Roseray Sand	179.8	8.82	46	8.56	1.39 MPa @ 43°C
Bench Upper Shaunavon	438.9	8.82		12.45	
Benson East Midale Beds	721.2				
Benson Frobisher Beds	741.8				
Benson Midale Beds	754.4	7.92	68	14.38	
Beverley Cantuar Sand	243.8	9.05	48	9.11	9.11 MPa @ 48°C
Beverley East Cantuar Sand	232.3				
Beverley North Cantuar Sand	232.9				
Beverley Upper Roseray Sand	246.9	8.78			
Bienfait Midale Beds	1005.7				
Big Gully McLaren Sand	+141.7				
Big Gully North Lloydminster Sand	+60.4				
Big Gully Waseca Sand	+125.0				
Bone Creek Upper Shaunavon	464.8	8.60	48	12.27	4.78 MPa @ 49°C
Bromhead Midale Beds	1098.0	8.60		17.65	
Browning Frobisher-Alida Beds	682.8	7.24	59	12.55	
Bryant Frobisher Beds	836.2				
Bryant Midale Beds	807.4				
Buffalo Coulee Bakken Sand	108.2	9.66	26		2.21 MPa @ 26°C
Buffalo Coulee North Bakken Sand	93.0				
Butte Upper Shaunavon	417.6	8.82	49	12.37	1.23 MPa @ 49°C
Buzzard Lloydminster Sand	+38.4				
Cactus Lake Basal Mannville Bakken Sand	97.1				

INITIAL OIL POOL PRESSURE DATA

POOL NAME	DATUM METRES SUBSEA	PRESSURE GRADIENT kPA/m	TEMPERATURE AT DATUM DEPTH °C	VIRGIN PRESSURE AT DATUM DEPTH MPa	SATURATION PRESSURE
Cantal Frobisher-Alida Beds	579.1	6.79	47	10.87	10.85 MPa @ 47°C
Cantal South Frobisher-Alida Beds	579.1				
Cantuar East Cantuar Sand	228.6	8.60	51		
Cantuar East Roseray Sand	228.6	8.60	51		
Cantuar Lower Roseray Sand	228.6	8.78	51	9.10	9.10 MPa @ 52°C
Cantuar Main Cantuar Sand	227.1	8.78	51	8.95	8.95 MPa @ 52°C
Cantuar North Roseray Sand	238.8				
Carnduff Frobisher Beds	752.9	7.24	59	12.98	
Carnduff Midale Beds	723.9	7.24	58	15.17	
Celtic G.P. Sand	+108.5				
Celtic Sparky Sand	+118.9				
Celtic Waseca Sand	+140.2				
Chambery Upper Shaunavon	488.7				
Clarilaw Frobisher-Alida Beds	623.3	7.24	58	11.78	
Clarilaw West Frobisher-Alida Beds	619.7				
Clintonville Shaunavon	456.8				
Coleville Bakken Sand	109.7	9.50			
Coleville Mannville Sand	54.9				
Coleville South Bakken Sand	127.4				
Coleville South Mannville Sand	66.1				
Colgate Midale Beds	902.4				
Cosine Lake Lloydminster Sand	100.6				
Court Bakken Sand	129.8				
Covington Upper Shaunavon	416.1	8.82	52	11.94	3.52 MPa @ 51°C
Covington West Upper Shaunavon	417.6	8.82			
Crystal Hill Souris Valley Beds	434.3	8.37		9.19	
Dalesboro Frobisher-Alida Beds	670.6	8.37	56	12.00	
Dee Valley East Sparky Sand	+79.2				
Dee Valley East Waseca Sand	+102.1				
Dee Valley Waseca Sand	103.6				
Delta Upper Shaunavon	306.3	8.82	46	10.57	7.46 MPa @ 47°C
Dodsland Viking Sand	+4.6	7.99	23	6.41	6.41 MPa @ 23°C
Dollard Lower Shaunavon	459.6				
Dollard Upper Shaunavon	434.3	8.60	59	11.80	6.32 MPa @ 60°C
Druid Mannville Sands	59.0				
Dulwich North Sparky Sand	+86.9				
Dulwich Sparky Sand	+79.2				
Ear Lake Waseca Sand	+12.3				
Eastbrook Upper Shaunavon	461.8	9.05	54	15.70	
Eastend Shaunavon	470.3				
Edam Waseca Sand	+119.2				
Edam West Sparky/G.P. Sand	+92.7				
Edam West Waseca Sand	+115.6				
Edenvale Tilston Beds	533.4	7.69	43		
Elmore Frobisher Beds	701.0	7.92	52	12.05	6.83 MPa @ 51°C

INITIAL OIL POOL PRESSURE DATA

POOL NAME	DATUM METRES SUBSEA	PRESSURE GRADIENT kPA/m	TEMPERATURE AT DATUM DEPTH °C	VIRGIN PRESSURE AT DATUM DEPTH MPa	SATURATION PRESSURE
Elmore Midale Beds	685.8	7.69	52	14.33	
Elswick Midale Beds	948.8				
Epping G.P. Sand	+57.9				
Epping Sparky Sand	+67.1				
Eureka Viking	18.3	7.99	23	6.12	4.43 MPa @ 26°C
Evesham North McLaren Sand	+2.0				
Evesham North Sparky Sand	32.4				
Evesham Sparky Sand	33.2				
Eyehill Cummings Sand	89.9				
Fertile Tilston Beds	437.0				
Fertile Tilston-Souris Valley Beds	434.4				
Flat Lake Ratcliffe Beds	1271.0	8.37	73	20.15	9.80 MPa @ 81°C
Florence Frobisher Beds	789.4	8.37	57	13.28	
Forest Bank Mannville Sands	+115.8				
Forest Bank Sparky Sand	+99.1				
Forest Bank Waseca Sand	+120.4				
Forgan Viking Sand	9.2				
Fosterton Roseray Sand:					
Middle (II) Roseray Sand	221.0	8.82	52	9.10	
Lower (I) Roseray Sand	221.0	8.82	52	9.10	
Northwest Group	218.5	8.82	52		
Fosterton South Cantuar Sand	225.3				
Fosterton South Roseray Sand	229.6				
Freda Lake Ratcliffe Beds	960.1	8.37		18.56	
Freemont Sparky Sand	+43.8				
Freemont Waseca Sand	+62.5				
Freestone Frobisher-Alida Beds	570.0	7.92	54	11.29	
Frys East Tilston-Souris Valley Beds	395.4				
Frys Tilston-Souris Valley Beds	402.3	8.37			
Furness Sparky Sand	+73.2				
Fusilier Bakken Sand	121.9	9.27			
Gainsborough Frobisher-Alida Beds	579.1	7.24	44		
Gainsborough North Frobisher-Alida Beds	572.2				
Glen Ewen Frobisher Beds	751.3	7.24	56		
Glen Ewen Midale Beds	728.5	7.24	56	15.17	
Golden Lake North Sparky Sand	+96.0				
Golden Lake North Waseca Sand	+121.9				
Golden Lake South Sparky Sand	+96.0				
Golden Lake South Waseca Sand	+115.8				
Griffin Frobisher Beds	690.4	8.60	62		
Gull Lake Basal Cantuar Sand	300.2	8.82	47		8.79 MPa @ 47°C
Gull Lake Central Upper Shaunavon	387.1	8.82	51		
Gull Lake North Upper Shaunavon	365.8	8.82	48	11.11	1.10 MPa @ 46°C
Gull Lake South Upper Shaunavon	402.3	8.82	52	11.71	
Gully Lake Waseca Sand	+103.6				

INITIAL OIL POOL PRESSURE DATA

POOL NAME	DATUM METRES SUBSEA	PRESSURE GRADIENT kPA/m	TEMPERATURE AT DATUM DEPTH °C	VIRGIN PRESSURE AT DATUM DEPTH MPa	SATURATION PRESSURE
Handsworth Alida Beds	536.4	8.60	51	10.99	
Hartaven Frobisher-Alida Beds	577.6	8.60	56	11.58	
Hastings East Frobisher Beds	598.7				
Hastings Frobisher Beds	643.1	6.79	49	11.65	11.65 MPa @ 50°C
Hastings West Frobisher Beds	668.5				
Hazelwood South Tilston Beds	437.0				
Hazelwood Tilston Beds	425.2	8.37	43	9.53	
Hazelwood West Tilston Beds	428.7				
Hazlet Roseray Sand	205.7	9.05	47	9.13	5.60 MPa @ 47°C
Hearts Hill Bakken Sand	64.9				
Hillmond G.P. Sand	+102.0				
Hillmond Sparky Sand	+108.8				
Hoffer Ratcliffe Beds (Lower)	1248.2	8.60		19.47	
Hoffer Ratcliffe Beds (Upper)	1231.4	8.60		19.33	
Hoosier Bakken Sand	150.9	9.50			
Hume Frobisher Beds	739.1	8.60	64	13.21	
Hume Midale Beds	723.9	8.60		14.23	
Hummingbird Bakken Sand	1488.0				
Hummingbird Birdbear	1585.0	8.14	82	23.16	8.09 MPa @ 82°C
Hummingbird Ratcliffe Beds	1155.2	8.60	71	18.70	6.03 MPa @ 71°C
Huntoon Frobisher Beds	754.4	8.60	61		
Huntoon Midale Beds	737.6	8.60	55		
Illerbrun Upper Shaunavon	414.5	8.82	49	11.86	3.15 MPa @ 49°C
Ingoldsby Frobisher-Alida Beds	548.6	7.89	46	10.51	4.81 MPa @ 45°C
Ingoldsby West Frobisher-Alida Beds	659.6				
Innes Frobisher Beds	719.3	8.60	63	12.98	7.78 MPa @ 61°C
Instow Upper Shaunavon	464.8	8.60	48	12.27	4.78 MPa @ 49°C
Java Cantuar Sand	242.3				
Johnston Upper Shaunavon	371.9	8.82	46	9.24	
Kenosee Tilston Beds	426.7	7.92	46	9.38	
Kerrobert Viking Sand	3.0				
Kisbey Birdbear	1018.3				
Kisbey Frobisher-Alida Beds	587.8				
Lake Alma Ratcliffe Beds	1268.0	8.37	67	20.27	
Landrose McLaren Sand	+144.8				
Landrose Waseca Sand	+129.5				
Lashburn South Sparky Sand	+93.7				
Lashburn South Waseca Sand	+117.3				
Lashburn Waseca Sand	+126.5				
Lashburn West Sparky Sand	+81.4				
Leitchville Shaunavon	452.6	8.60	50	12.51	4.78 MPa @ 49°C
Leon Lake Shaunavon	457.2	8.60	52	10.69	5.52 MPa @ 41°C
Lightning Tilston Beds	449.6	7.92	46	9.39	
Lloydminster Sparky Sand	+83.8				
Lone Rock Sparky Sand	+71.6				

INITIAL OIL POOL PRESSURE DATA

POOL NAME	DATUM METRES SUBSEA	PRESSURE GRADIENT kPA/m	TEMPERATURE AT DATUM DEPTH °C	VIRGIN PRESSURE AT DATUM DEPTH MPa	SATURATION PRESSURE
Lost Horse Hill Frobisher-Alida Beds	559.3	8.14	57	11.40	3.36 MPa @ 55°C
Lougheed Midale Beds	807.7	8.14	61		
Loverna Detrital	126.5	8.60			
Low Lake Waseca Sand	+111.3				
Lucky Hills Viking	7.6	8.37			
Luseland Bakken Sand	44.9				
Macklin Sparky Sand	39.6				
Macoun Midale Beds	946.4	8.82	63		9.32 MPa @ 63°C
Macoun West Midale Beds	978.3				
Maidstone McLaren Sand	+126.1				
Maidstone Waseca Sand	+113.4				
Main Success Roseray Sand	225.6	8.60	50	9.06	8.67 MPa @ 59°C
Manito Lake Sparky Sand	+27.7				
Marsden South Sparky Sand	+31.7				
Marsden Sparky Sand	+36.1				
Melrose Frobisher-Alida Beds	551.7	8.14	54		
Midale Central Frobisher Beds	786.4	7.69	63	14.31	5.24 MPa @ 57°C
Midale Central Midale Beds	800.1	7.92	63	14.31	6.09 MPa @ 63°C
Minard Midale Beds	738.5				
Moose Mountain Tilston Beds	435.9	8.48	46	9.45	3.14 MPa @ 41°C
Moose Valley Tilston Beds	428.2	8.60			
Morrisview Frobisher-Alida Beds	661.4	8.37	48	12.37	
Neilburg McLaren Sand	+103.9				
Neptune Ratcliffe Beds	1034.8	8.37			
North Antler Midale Beds	658.4	8.14	56	13.98	
Northgate Frobisher Beds	1033.3	8.14	63		
Northgate Midale Beds	1021.1	7.24	71	18.03	14.48 MPa @ 70°C
North Handsworth Alida Beds	538.0	8.60	55	11.08	
North Hoosier Bakken Sand	135.3	9.50	31	7.74	7.79 MPa @ 31°C
North Hoosier Basal Blairmore Sand	120.4	9.34	29	5.85	
Northminster North G.P. Sand	+83.2				
Northminster North Sparky Sand	+94.1				
Northminster Sparky Sand	+91.4				
North Premier Roseray Sand	228.6	8.60	47	9.25	3.12 MPa @ 47°C
North Premier Upper Shaunavon	310.9	8.82	57	10.31	0.89 MPa @ 49°C
North Smiley Bakken Sand	97.0				
Nottingham Alida Beds	548.6	7.15	43	10.60	10.66 MPa @ 44°C
Notukeu Upper Shaunavon	461.2				
Oakley Frobisher Beds	582.2	6.72	46	10.95	10.95 MPa @ 47°C
Oungre Ratcliffe Beds	1188.7	8.14	70	18.96	8.07 MPa @ 74°C
Parkman Souris Valley Beds	416.1	8.37	49	9.09	
Parkman South Tilston-Souris Valley Beds	455.7	8.23	38	9.45	
Parkman Tilston Beds	442.0	7.92	43	9.51	2.79 MPa @ 43°C
Parkman Tilston-Souris Valley Beds	402.3	7.92	38	9.10	2.41 MPa @ 38°C
Pennant Upper Shaunavon	265.2	9.05			

INITIAL OIL POOL PRESSURE DATA

POOL NAME	DATUM METRES SUBSEA	PRESSURE GRADIENT kPA/m	TEMPERATURE AT DATUM DEPTH °C	VIRGIN PRESSURE AT DATUM DEPTH MPa	SATURATION PRESSURE
Pikes Peak G.P. Sand	+81.0				
Pikes Peak Sparky Sand	+91.4				
Pikes Peak Waseca Sand	+123.4				
Pinto Frobisher Beds	1036.3	7.01	66	16.55	
Pinto Midale Beds	1024.1	7.01	70	17.24	13.85 MPa @ 70°C
Plato North Viking Sand	20.8				
Plato Viking Sand	9.1	8.37	24	6.89	3.28 MPa @ 21°C
Plenty Viking Sand	+2.7				
Plover Lake Bakken Sand	86.6				
Prairiedale Viking Sand	22.1				
Queensdale East Frobisher-Alida Beds	573.0	5.78	47	10.84	7.72 MPa @ 46°C
Queensdale North Alida Beds	588.3	7.58	49	10.85	
Queensdale West Alida Beds	600.5	7.58	48	11.25	11.24 MPa @ 48°C
Ralph Midale Beds	723.9	7.92			
Rapdan Upper Shaunavon	449.6	8.60	49	13.72	5.61 MPa @ 56°C
Rapdan West Upper Shaunavon	471.0				
Red Jacket Gravelbourg	153.7				
Red Jacket Shaunavon-Gravelbourg	82.7				
Rocanville Bakken Sand	160.0	8.37	27	6.23	
Roncott Bakken Sand	1121.7	8.08	59		2.05 MPa @ 52°C
Rosebank Alida Beds	536.4	7.19	44	10.49	
Rosebank South Alida Beds	533.4	7.46	43		
Rush Lake Sparky Sand	+88.3				
Rush Lake Waseca Sand	+113.9				
Salt Lake Lloydminster Sand	56.2				
Senlac Lloydminster Sand	78.2				
Sherwood Frobisher Beds	701.0	7.92	56	12.27	8.76 MPa @ 56°C
Silverdale Sparky Sand	+68.6				
Silverton Frobisher Beds	618.7	8.37	49		
Skinner Lake Ratcliffe Beds	1008.9	8.37			
Smiley Dewar Viking	15.2	7.99	23	6.47	6.36 MPa @ 22°C
Smiley Dewar Viking Chert	18.3	7.99	23	6.49	
Souris Flat Frobisher Beds	789.4	8.28	59	13.34	11.82MPa @ 59°C
South Fletwode Tilston Beds	429.8	7.92	44	9.45	
South Success Roseray Sand	231.0	8.60	51	8.96	8.96 MPa @ 53°C
Standard Hill Waseca Sand	+109.7				
Star Valley Frobisher-Alida Beds	536.4	7.46	52	10.82	8.61 MPa @ 52°C
Steelman Frobisher Beds	853.4	7.01	67	14.36	
Steelman Midale Beds	853.4	7.01	67	14.34	14.34 MPa @ 63°C
Storthoaks Alida-Tilston Beds	493.8	7.92	38	9.80	8.09 MPa @ 42°C
Stoughton Frobisher-Alida Beds	644.7	7.46	61	12.07	8.09 MPa @ 62°C
Stoughton South Frobisher Beds	647.7	7.46		14.13	
Success North Roseray Sand	236.9				
Success Roseray Sand Alpha	219.5	8.60	51	8.76	7.86 MPa @ 51°C
Suffield Roseray Sand	259.1	8.60	52	12.98	7.41 MPa @ 44°C

INITIAL OIL POOL PRESSURE DATA

POOL NAME	DATUM METRES SUBSEA	PRESSURE GRADIENT kPA/m	TEMPERATURE AT DATUM DEPTH °C	VIRGIN PRESSURE AT DATUM DEPTH MPa	SATURATION PRESSURE
Suffield Upper Shaunavon	318.5	8.82	50	10.82	
Tableland Winnipegosis	2029.9				
Tangleflags East McLaren Sand	+139.6				
Tangleflags G.P. Sand	+100.6				
Tangleflags Lloydminster Sand	+61.0				
Tangleflags McLaren Sand	+141.4				
Tangleflags North G.P. Sand	+99.1				
Tangleflags North Lloyd/Cummings Sand	+57.7				
Tangleflags Sparky Sand	+109.7				
Tangleflags West G.P. Sand	+102.9				
Tangleflags West Lloydminster Sand	+62.4				
Tangleflags West McLaren Sand	+146.8				
Tangleflags West Sparky Sand	+113.5				
Tatagwa Midale Beds	857.4				
Tatagwa North Midale Beds	817.4				
Verendrye Viking Sand	22.0				
Verlo Roseray Sand	213.4	8.82	52	9.14	9.24 MPa @ 39°C
Viewfield Frobisher Beds	670.6	8.69	65	12.22	9.03 MPa @ 65°C
View Hill Midale Beds	957.1	8.75	76	15.69	
Wapella Sand	76.2	8.37	32	5.25	0.34 MPa @ 29°C
Warmley Alida Beds	496.2	8.37	54	10.15	
Wauchope Alida-Tilston Beds	524.1				
Wauchope North Tilston Beds	458.3				
Weir Hill Frobisher Beds	762.0	7.24			
Westhazel G.P. Sand	+90.1				
Westhazel Sparky Sand	+103.8				
West Innes Frobisher Beds	722.4	8.60	64	13.07	
West Kingsford Midale Beds	876.3	7.01	67	14.82	9.40 MPa @ 67°C
Weyburn Frobisher Beds	807.7	8.14	61		
Weyburn Midale Beds	807.7	8.14	61	14.60	
White Bear Tilston Beds	445.0	7.92	43	9.74	
White Bear Tilston-Souris Valley Beds	457.2	8.37	39	9.47	2.41 MPa @ 39°C
Whitemud Shaunavon	489.4	9.05	54	13.79	5.52 MPa @ 41°C
Whiteside Viking Sand	36.6	7.92	24	6.38	
Wildwood Alida Beds	582.2	8.37	48	10.77	
Willmar Frobisher Alida Beds	661.4	7.24	54	11.87	11.32 MPa @ 53°C
Winmore Frobisher Beds	641.6	8.60		11.23	
Winter Cummings Sand	36.9				
Wordsworth Frobisher-Alida Beds	650.0				
Workman Frobisher Beds	701.0	7.69	54	12.27	6.55 MPa @ 59°C
Workman Midale Beds	665.8	7.24	54	14.75	7.64 MPa @ 53°C

INITIAL GAS POOL PRESSURE DATA

POOL NAME	DATUM METRES SUBSEA	TEMPERATURE AT DATUM DEPTH °C	PSEUDO-REDUCED TEMPERATURE	PSEUDO-REDUCED PRESSURE	VIRGIN PRESSURE AT DATUM DEPTH kPa
Bayhurst Viking Gas Pool	+9.1	25	1.61	1.47	6 700
Bayhurst West Viking Gas Pool	-7.6	28	1.60	1.47	6 720
Beacon Hill Mannville Sand Gas Pool	+256.0	21	1.56	0.47	2 170
Beacon Hill West Mannville Sand Gas Pool	+241.7	21	1.56	0.46	2 351
Beverley East Cantuar Gas Pool	+170.0	46	1.67	2.11	9 650
Bigstick Second White Specks Gas Pool	+101.2	26	1.59	0.46	6 105
Brock East Viking Gas Pool	-7.6	29	1.62	1.55	7 060
Brock Viking Sand Gas Pool	-3.0	28	1.59	1.46	6 690
Bronson Lake Colony Sand Gas Pool	+197.7	16	1.54	0.59	2 706
Bronson Lake Waseca Sand Gas Pool	+183.6	17	1.54	0.62	2 846
Burstall Medicine Hat Sand Gas Pool	+231.5	17	1.53	0.94	4 309
Burstall Milk River Gas Pool	+278.8	16	1.53	0.75	3 447
Burstall North Viking Sand Gas	-11.0	27	1.71	1.59	7 782
Cavalier Spinney Hill Sand Gas Pool	+162.1	18	1.60	0.70	3 140
Coleville-Smiley Viking Sand Gas Pool	+12.2	24	1.50	1.40	6 480
Crane Lake Milk River Gas Pool	+308.7	15	1.53	0.75	3 585
Crane Lake South Second White Specks Gas Pool	+56.1	27	1.46	1.33	6 033
Dodsland North Viking Gas Pool	+21.3	23	1.50	1.33	6 110
Driver Bakken Sand Gas Pool	-100.4	27	1.58	1.53	7 079
Driver Mannville Sand Gas Pool	-49.9	27	1.60	1.50	6 804
Fort Pitt Mannville Sand Gas Pool	+191.0	20	1.79	0.61	2 790
Fort Pitt North Colony Sand Gas Pool	+198.9	19	1.77	0.62	2 850
Fort Pitt North Waseca Sand Gas Pool	+198.9	19	1.77	0.62	2 850
Freefight Milk River Gas Pool	+295.8	15	1.53	0.75	3 406
Glidden Viking Gas Pool	-1.5	22	1.57	1.47	6 690
Greenan Viking Gas Pool	-15.2	28	1.61	1.45	6 580
Gull Lake Cantuar Gas Pool	-259.1	43	1.59	2.05	9 480
Hatton Medicine Hat Sand Gas Pool	+274.3	17	1.53	0.94	4 310
Hatton Milk River Gas Pool	+321.6	16	1.53	0.75	3 450
Hoosier Viking Sand Gas Pool	-18.3	26	1.52	1.43	6 560
Ingebrigt Milk River Gas Pool	+289.0	16	1.53	0.75	3 470
Liebenthal Milk River Gas Pool	+297.2	16	1.53	0.79	3 630
Lloydminster Colony Sand Gas Pool	+134.1	23	1.54	0.70	3 260
Loverna North Mannville Sand Gas Pool	-41.8	33	1.58	1.65	7 694
Loverna South Bakken Sand Gas Pool	-136.8	30	1.57	1.74	8 074
Loverna South Viking Sand Gas Pool	-4.0	24	1.54	1.12	5 144
Loverna West Bakken Sand Gas Pool	-135.3	32	1.56	1.77	8 073
Marengo Viking Gas Pool	-10.7	21	1.48	1.47	6 740
Milton Viking Sand Gas Pool	-18.3	23	1.49	1.42	6 550
Pierceland Mannville Sand Gas Pool	+256.0	21	1.56	0.46	2 100
Senate Second White Specks Gas Pool	+121.9	29	1.61	1.39	6 281
Superb Bakken Sand Gas Pool	-79.1	29	1.59	1.53	6 978
Tangleflags Colony Sand Gas Pool	+159.1	20	1.61	0.69	3 119
Tangleflags McLaren Sand Gas Pool	+149.3	21	1.55	0.71	3 247
Tangleflags Second White Specks Gas Pool	+274.0	18	1.54	0.67	3 057
Tangleflags St. Walburg Sand Gas Pool	+254.0	18	1.55	0.73	3 345
Totnes Viking Gas Pool	-3.0	24	1.59	1.50	6 830
Wheat Valley Cantuar Sand Gas Pool	-220.0	40	1.63	1.73	8 003
Whiteside Ribstone Creek Sand Gas Pool	+481.6	20	1.53	0.43	2 000
Whiteside West Ribstone Creek Sand Gas Pool	+485.3	14	1.53	0.27	1 240
Whiteside West Viking Sand Gas Pool	-14.4	27	1.51	1.24	5 940

MPR FACTORS

MAXIMUM PERMISSIVE RATE FACTORS*

HORIZON POOL CODE	POOL NAME	AVERAGE INTERSTITIAL WATER (SW)	AVERAGE SHRINKAGE FACTOR (1/Boi)	ASSIGNED AREA (LSDS) (A)	(ACRES)
232501	Aberfeldy G.P. Sand Pool	30	90	1	40
232106	Aberfeldy Sparky Sand Pool	30	90	1	40
433007	Alameda Midale Beds Pool	35	75	2	80
435191	Alameda West Frobisher Beds Pool	35	75	2	80
433036	Alameda West Midale Beds Pool	35	72	2	80
435038	Alida East Frobisher-Alida Beds Pool	35	75	1 & 2	40 & 80
435785	Alida North Alida Beds Pool	35	75	1	40
435044	Alida West Frobisher-Alida Beds Pool	35	77	1	40
239022	Alsask Basal Blairmore Sand Pool	25	75	1	40
314552	Antelope Lake East Roseray Sand Pool	30	93	2	80
331064	Antelope Lake Upper Shaunavon Pool	25	93	2	80
435024	Arcola Frobisher-Alida Beds Pool	35	79	1	40
435040	Auburnton Frobisher-Alida Beds Pool	35	75	1	40
227331	Avon Hill Viking Pool	35	90	1	40
232135	Baldwinton Sparky Sand Pool	30	90	1	40
430073	Battle Creek Madison Pool	25	90	2	80
331001	Battle Creek South Upper Shaunavon Pool	25	90	2	80
331072	Battle Creek Upper Shaunavon Pool	25	90	2	80
314540	Battrum East Roseray Sand Pool	41	97.5	2	80
314553	Battrum North Roseray Sand Pool	41	97.5	1	40
314546	Battrum Roseray Sand Pool (Upper)	41	97.5	1 & 2	40 & 80
	(Main)	17	97.5	1 & 2	40 & 80
331060	Bench Upper Shaunavon Pool	25	75	4	160
433076	Benson East Midale Beds Pool	50	89	2	80
435173	Benson Frobisher Beds Pool	50	89	2	80
433075	Benson Midale Beds Pool	50	89	2 & 4	80 & 160
238146	Beverley Cantuar Sand Pool	30	90	2	80
238152	Beverley East Cantuar Sand Pool	30	90	2	80
238148	Beverley North Cantuar Sand Pool	30	90	1 & 2	40 & 80
314641	Beverley Upper Roseray Sand Pool	35	90	1	40
433035	Bienfait Midale Beds Pool	35	85	2	80
231202	Big Gully McLaren Sand Pool	30	90	1	40
234120	Big Gully North Lloydminster Sand Pool	30	90	1	40
231309	Big Gully Waseca Sand Pool	30	90	1	40
331050	Bone Creek Upper Shaunavon Pool	15	94	2	80
433089	Bromhead Midale Beds Pool	35	75	4	160
435019	Browning Frobisher-Alida Beds Pool	35	75	2	80
435172	Bryant Frobisher Beds Pool	35	75	4	160
433099	Bryant Midale Beds Pool	35	89	4	160
441422	Buffalo Coulee Bakken Sand Pool	25	93	1/2	20
441428	Buffalo Coulee North Bakken Sand Pool	25	93	1	40

MAXIMUM PERMISSIVE RATE FACTORS*

HORIZON POOL CODE	POOL NAME	AVERAGE INTERSTITIAL WATER (SW)	AVERAGE SHRINKAGE FACTOR (1/Boi)	ASSIGNED AREA (LSDS) (A)	(ACRES)
331059	Butte Upper Shaunavon Pool	25	96	2	80
234133	Buzzard Lloydminster Sand Pool	30	90	1	40
441426	Cactus Lake Basal Mannville - Bakken Sand Pool	25	95	1	40
435005	Cantal Frobisher-Alida Beds Pool	35	75	1	40
435039	Cantal South Frobisher-Alida Beds Pool	35	75	2	80
238143	Cantuar East Cantuar Sand Pool	30	90	2	80
314550	Cantuar East Roseray Sand Pool	35	90	2	80
314741	Cantuar Lower Roseray Sand Pool	35	95	1	40
238141	Cantuar Main Cantuar Sand Pool	30	90	1	40
314555	Cantuar North Roseray Sand Pool	35	95	2	80
435180	Carnduff Frobisher Beds Pool	35	75	2	80
433006	Carnduff Midale Beds Pool	35	75	2	80
232511	Celtic G.P. Sand Pool	30	90	1	40
230903	Celtic Mannville Sands Pool	30	90	1	40
232122	Celtic Sparky Sand Pool	30	90	1	40
231313	Celtic Waseca Sand Pool	30	90	1	40
331073	Chambery Upper Shaunvon Pool	20	91	4	160
435021	Clarilaw Frobisher-Alida Beds Pool	35	75	2	80
435041	Clarilaw West Frobisher-Alida Beds Pool	35	75	1	40
330062	Clintonville Shaunavon Pool	25	90	4	160
441421	Coleville Bakken Sand Pool	15	93	1/2	20
230026	Coleville Mannville Sand Pool	25	90	1	40
441429	Coleville South Bakken Sand Pool	15	93	1	40
230027	Coleville South Mannville Sand Pool	25	90	1	40
433002	Colgate Midale Beds Pool	35	92	2	80
234122	Cosine Lake Lloydminster Sand Pool	30	90	1	40
441431	Court Bakken Sand Pool	25	95	1	40
331055	Covington Upper Shaunavon Pool	15	94	2	80
331071	Covington West Upper Shaunavon Pool	25	75	4	160
438030	Crystal Hill Souris Valley Beds Pool	40	90	1 & 2	40 & 80
435028	Dalesboro Frobisher-Alida Beds Pool	35	78	2	80
230909	Dee Valley East Mannville Sands Pool	30	90	1	40
232125	Dee Valley East Sparky Sand Pool	30	90	1	40
231316	Dee Valley East Waseca Sand Pool	30	90	1	40
231310	Dee Valley Waseca Sand Pool	30	90	1	40
331046	Delta Upper Shaunavon Pool	25	93	2	80
227327	Dodsland Viking Sand Pool	35	90	1	40
335001	Dollard Lower Shaunavon Pool	25	95	2 & 4	80 & 160
331041	Dollard Upper Shaunavon Pool	5	91	2 & 4	80 & 160
230025	Druid Mannville Sands Pool	30	90	1	40
232109	Dulwich North Sparky Sand Pool	30	90	1/2	20

MAXIMUM PERMISSIVE RATE FACTORS*

HORIZON POOL CODE	POOL NAME	AVERAGE INTERSTITIAL WATER (SW)	AVERAGE SHRINKAGE FACTOR (1/Boi)	ASSIGNED AREA (LSDS) (A)	ASSIGNED AREA (ACRES)
232102	Dulwich Sparky Sand Pool	30	90	1/4	10
231324	Ear Lake Waseca Sand Pool	30	90	1	40
331056	Eastbrook Upper Shaunavon Pool	20	91	2	80
330074	Eastend Shaunavon Pool	20	91	2 & 4	80 & 160
231320	Edam Waseca Sand Pool	30	90	1	40
230904	Edam West Mannville Sands Pool	30	90	1/2	20
232141	Edam West Sparky/G.P. Sand Pool	30	90	1/2	20
231323	Edam West Waseca Sand Pool	30	90	1/2	20
437032	Edenvale Tilston Beds Pool	40	90	2	80
435184	Elmore Frobisher Beds Pool	45	86	2	80
433018	Elmore Midale Beds Pool	35	75	2	80
433001	Elswick Midale Beds Pool	35	88	2	80
232504	Epping G.P. Sand Pool	30	90	1/2 & 1	20 & 40
232104	Epping Sparky Sand Pool	30	90	1/2 & 1	20 & 40
227323	Eureka Viking Pool	35	90	1	40
231208	Evesham North McLaren Sand Pool	30	90	1	40
232145	Evesham North Sparky Sand Pool	30	90	1	40
232142	Evesham Sparky Sand Pool	30	90	1	40
235002	Eyehill Cummings Sand Pool	30	90	1	40
437037	Fertile Tilston Beds Pool	40	90	1	40
437580	Fertile Tilston-Souris Valley Beds Pool	40	90	1	40
432085	Flat Lake Ratcliffe Beds Pool	35	80	4	160
435187	Florence Frobisher Beds Pool	35	75	2	80
230902	Forest Bank Mannville Sands Pool	30	90	1	40
232123	Forest Bank Sparky Sand Pool	30	90	1	40
231305	Forest Bank Waseca Sand Pool	30	90	1	40
227338	Forgan Viking Sand Pool	35	90	1	40
314541	Fosterton Roseray Sand Pool	16	95	1	40
238151	Fosterton South Cantuar Sand Pool	30	90	1	40
314554	Fosterton South Roseray Sand Pool	16	95	1	40
432090	Freda Lake Ratcliffe Beds Pool	35	90	2	80
232130	Freemont Sparky Sand Pool	30	90	1	40
231315	Freemont Waseca Sand Pool	30	90	1	40
435082	Freestone Frobisher-Alida Beds Pool	35	75	1 & 2	40 & 80
437581	Frys East Tilston-Souris Valley Beds Pool	40	90	1	40
437579	Frys Tilston-Souris Valley Beds Pool	40	90	1	40
232113	Furness Sparky Sand Pool	30	90	1/4	10
441425	Fusilier Bakken Sand Pool	25	95	1	40
435009	Gainsborough Frobisher-Alida Beds Pool	30	75	2	80
435020	Gainsborough North Frobisher-Alida Beds Pool	30	75	2	80
435181	Glen Ewen Frobisher Beds Pool	35	75	2	80

MAXIMUM PERMISSIVE RATE FACTORS*

HORIZON POOL CODE	POOL NAME	AVERAGE INTERSTITIAL WATER (SW)	AVERAGE SHRINKAGE FACTOR (1/Boi)	ASSIGNED AREA (LSDS) (A)	ASSIGNED AREA (ACRES)
433008	Glen Ewen Midale Beds Pool	35	75	2 & 4	80 & 160
230906	Golden Lake North Mannville Sands Pool	30	90	1	40
232112	Golden Lake North Sparky Sand Pool	30	90	1	40
231306	Golden Lake North Waseca Sand Pool	30	90	1	40
230906	Golden Lake South Mannville Sands Pool	30	90	1	40
232107	Golden Lake South Sparky Sand Pool	30	90	1	40
231306	Golden Lake South Waseca Sand Pool	30	90	1	40
435168	Griffin Frobisher Beds Pool	35	89	2	80
238142	Gull Lake Basal Cantuar Sand Pool	35	92	1	40
331058	Gull Lake Central Upper Shaunavon Pool	25	97	2	80
331043	Gull Lake North Upper Shaunavon Pool	25	97	1	40
331057	Gull Lake South Upper Shaunavon Pool	25	97	4	160
231307	Gully Lake Waseca Sand Pool	30	90	1	40
435761	Handsworth Alida Beds Pool	35	75	2	80
435087	Hartaven Frobisher-Alida Beds Pool	40	89	1	40
435190	Hastings East Frobisher Beds Pool	35	75	2	80
435177	Hastings Frobisher Beds Pool	35	75	1 & 2	40 & 80
435160	Hastings West Frobisher Beds Pool	35	75	2	80
437029	Hazelwood South Tilston Beds Pool	40	90	2	80
437027	Hazelwood Tilston Beds Pool	40	90	1	40
437028	Hazelwood West Tilston Beds Pool	40	90	1	40
314548	Hazlet Roseray Sand Pool	21	94.7	2	80
441430	Hearts Hill Bakken Sand Pool	25	95	1	40
232515	Hillmond G.P. Sand Pool	30	90	1	40
232115	Hillmond Sparky Sand Pool	30	90	1	40
432094	Hoffer Ratcliffe Beds Pool	35	80	2 & 4	80 & 160
441424	Hoosier Bakken Sand Pool	25	95	1	40
435167	Hume Frobisher Beds Pool	35	89	2	80
433091	Hume Midale Beds Pool	35	89	2 & 4	80 & 160
441478	Hummingbird Bakken Sand Pool	25	95	2	80
521029	Hummingbird Birdbear Pool	25	83	2	80
432088	Hummingbird Ratcliffe Beds Pool	25	75	2	80
435163	Huntoon Frobisher Beds Pool	50	89	2	80
	(East Group)	35	89	2	80
433079	Huntoon Midale Beds Pool	50	89	2 & 4	80 & 160
331054	Ilerbrun Upper Shaunavon Pool	15	94	4	160
435003	Ingoldsby Frobisher-Alida Beds Pool	35	89	1 & 2	40 & 80
435042	Ingoldsby West Frobisher-Alida Beds Pool	35	75	1	40
435165	Innes Frobisher Beds Pool	35	89	2	80
331049	Instow Upper Shaunavon Pool	5	94	2	80
238150	Java Cantuar Sand Pool	30	90	2	80

MAXIMUM PERMISSIVE RATE FACTORS*

HORIZON POOL CODE	POOL NAME	AVERAGE INTERSTITIAL WATER (SW)	AVERAGE SHRINKAGE FACTOR (1/Boi)	ASSIGNED AREA (LSDS) (A)	ASSIGNED AREA (ACRES)
331042	Johnston Upper Shaunavon Pool	25	97	1	40
437016	Kenosee Tilston Beds Pool	40	90	2	80
227342	Kerrobert Viking Sand Pool	35	90	1	40
521034	Kisbey Birdbear Pool	40	75	2	80
435025	Kisbey Frobisher-Alida Beds Pool	26	80	2	80
432086	Lake Alma Ratcliffe Beds Pool	35	80	2	80
231201	Landrose McLaren Sand Pool	30	90	1/2 & 1	20 & 40
231301	Landrose Waseca Sand Pool	30	90	1/2 & 1	20 & 40
232129	Lashburn South Sparky Sand Pool	30	90	1	40
231314	Lashburn South Waseca Sand Pool	30	90	1	40
231303	Lashburn Waseca Sand Pool	30	90	1	40
232137	Lashburn West Sparky Sand Pool	30	90	1	40
330047	Leitchville Shaunavon Pool	35	90	2 & 4	80 & 160
330048	Leon Lake Shaunavon Pool	25	90	4	160
437023	Lightning Tilston Beds Pool	40	90	1	40
232124	Lloydminster Sparky Sand Pool	30	90	1/2	20
232103	Lone Rock Sparky Sand Pool	30	90	1/4	10
435073	Lost Horse Hill Frobisher-Alida Beds Pool	45	89	1 & 2	40 & 80
433081	Lougheed Midale Beds Pool	35	89	2	80
240024	Loverna Detrital Pool	25	75	1	40
231302	Low Lake Waseca Sand Pool	30	90	1/2	20
227335	Lucky Hills Viking Pool	35	90	1 & 2	40 & 80
441432	Luseland Bakken Sand Pool	25	95	1	40
232126	Macklin Sparky Sand Pool	30	90	1	40
433095	Macoun Midale Beds Pool	35	89	4	160
433069	Macoun West Midale Beds Pool	40	89	4	160
231205	Maidstone McLaren Sand Pool	30	90	1	40
231322	Maidstone Waseca Sand Pool	30	90	1	40
314543	Main Success Roseray Sand Pool	30	93	1	40
232143	Manito Lake Sparky Sand Pool	30	90	1	40
232138	Marsden South Sparky Sand Pool	30	90	1	40
232105	Marsden Sparky Sand Pool	30	90	1/4	10
435080	Melrose Frobisher-Alida Beds Pool	45	89	1	40
435161	Midale Central Frobisher Beds Pool	50	89	2	80
433072	Midale Central Midale Beds Pool	50	89	2	80
433070	Minard Midale Beds Pool	35	89	4	160
437014	Moose Mountain Tilston Beds Pool	40	90	1	40
437076	Moose Valley Tilston Beds Pool	40	90	1	40
435031	Morrisview Frobisher-Alida Beds Pool	35	80	2	80
231203	Neilburg McLaren Sand Pool	30	90	1	40
432092	Neptune Ratcliffe Beds Pool	35	80	4	160

MAXIMUM PERMISSIVE RATE FACTORS*

HORIZON POOL CODE	POOL NAME	AVERAGE INTERSTITIAL WATER (SW)	AVERAGE SHRINKAGE FACTOR (1/Boi)	ASSIGNED AREA (LSDS) (A)	(ACRES)
433026	North Antler Midale Beds Pool	35	75	2	80
435762	North Handsworth Alida Beds Pool	35	75	2	80
441423	North Hoosier Bakken Sand Pool	25	95	1	40
239021	North Hoosier Basal Blairmore Sand Pool	25	90	1/2	20
314542	North Premier Roseray Sand Pool	25	93	1	40
331044	North Premier Upper Shaunavon Pool	25	93	1 & 2	40 & 80
441433	North Smiley Bakken Sand Pool	25	93	1	40
435185	Northgate Frobisher Beds Pool	35	75	4	160
433020	Northgate Midale Beds Pool	35	75	2	80
232509	Northminster North G.P. Sand Pool	30	90	1	40
232134	Northminster North Sparky Sand Pool	30	90	1	40
232108	Northminster Sparky Sand Pool	30	90	1	40
435780	Nottingham Alida Beds Pool (Non-Unit)	35	75	2	80
	(Unit)	22	75	2	80
331074	Notukeu Upper Shaunavon Pool	25	75	4	160
435178	Oakley Frobisher Beds Pool	35	75	2	80
432083	Oungre Ratcliffe Beds Pool	35	80	1 & 2	40 & 80
438022	Parkman Souris Valley Beds Pool	50	90	2	80
437578	Parkman South Tilston-Souris Valley Beds Pool	40	90	2	80
437013	Parkman Tilston Beds Pool	40	90	1	40
437576	Parkman Tilston-Souris Valley Beds (Tilston)	40	90	1	40
	(Souris Valley)	50	90	1	40
331061	Pennant Upper Shaunavon Pool	25	95	2	80
232507	Pikes Peak G.P. Sand Pool	30	90	1	40
232128	Pikes Peak Sparky Sand Pool	30	90	1	40
231312	Pikes Peak Waseca Sand Pool	30	90	1	40
435182	Pinto Frobisher Beds Pool	35	75	1 & 2	40 & 80
433015	Pinto Midale Beds Pool	35	75	2	80
227340	Plato North Viking Pool	35	90	1	40
227333	Plato Viking Pool	35	90	1	40
227345	Plenty Viking Sand Pool	35	90	1	40
441427	Plover Lake Bakken Sand Pool	25	95	1	40
227343	Prairiedale Viking Sand Pool	35	90	1	40
435010	Queensdale East Frobisher-Alida Beds Pool	35	85	1	40
435782	Queensdale North Alida Beds Pool	35	75	1	40
435781	Queensdale West Alida Beds Pool	35	75	1	40
433097	Ralph Midale Beds Pool	35	89	2	80
331045	Rapdan Upper Shaunavon Pool	20	91	2 & 4	80 & 160
330063	Rapdan West Shaunavon Pool	20	91	4	160
354902	Red Jacket Gravelbourg Pool	38	98	2	80
336501	Red Jacket Shaunavon-Gravelbourg Pool	38	98	1	40

MAXIMUM PERMISSIVE RATE FACTORS*

HORIZON POOL CODE	POOL NAME	AVERAGE INTERSTITIAL WATER (SW)	AVERAGE SHRINKAGE FACTOR (1/Boi)	ASSIGNED AREA (LSDS) (A)	(ACRES)
441476	Rocanville Bakken Sand Pool	35	75	1	40
441477	Roncott Bakken Sand Pool	25	94	2	80
435779	Rosebank Alida Beds Pool	35	79	1 & 2	40 & 80
435778	Rosebank South Alida Beds Pool	35	79	2	80
230905	Rush Lake Mannville Sands Pool	30	90	1	40
232140	Rush Lake Sparky Sand Pool	30	90	1	40
231321	Rush Lake Waseca Sand Pool	30	90	1	40
234142	Salt Lake Lloydminster Sand Pool	30	90	1	40
234139	Senlac Lloydminster Sand Pool	30	90	1	40
435164	Sherwood Frobisher Beds Pool	35	86	1 & 2	40 & 80
232101	Silverdale Sparky Sand Pool	30	90	1/4 & 1/2 & 1	10 & 20 & 40
435179	Silverton Frobisher Beds Pool	35	75	2	80
432096	Skinner Lake Ratcliffe Beds Pool	35	80	4	160
227023	Smiley-Dewar Viking Pool	35	90	1	40
435186	Souris Flat Frobisher Beds Pool	35	75	2	80
437002	South Fletwode Tilston Beds Pool	40	90	1	40
314545	South Success Roseray Sand Pool	30	93	1	40
231311	Standard Hill Waseca Sand Pool	30	90	1	40
435001	Star Valley Frobisher-Alida Beds Pool	35	81	1	40
435176	Steelman Frobisher Beds Pool	35	75	2	80
433004	Steelman Midale Beds Pool	35	72	2	80
436276	Storthoaks Alida-Tilston Beds Pool (Alida)	35	79	2	80
	(Tilston)	40	90	2	80
435078	Stoughton Frobisher-Alida Beds Pool	35	86	2	80
435171	Stoughton South Frobisher Beds Pool	35	86	2	80
314551	Success North Roseray Sand Pool	30	93	1	40
314544	Success Roseray Sand Alpha Pool	30	93	1	40
314549	Suffield Roseray Sand Pool	35	95	1 & 2	40 & 80
331052	Suffield Upper Shaunavon Pool	25	97	2	80
543004	Tableland Winnipegosis Pool	19	73	4	160
231204	Tangleflags East McLaren Sand Pool	30	90	1	40
232505	Tangleflags G.P. Sand Pool	30	90	1	40
234121	Tangleflags Lloydminster Sand Pool	30	90	1	40
230901	Tangleflags Mannville Sands Pool	30	90	1	40
231206	Tangleflags McLaren Sand Pool	30	90	1	40
232506	Tangleflags North G.P. Sand Pool	30	90	1	40
234128	Tangleflags North Lloyd/Cummings Sand Pool	30	90	1	40
232114	Tangleflags Sparky Sand Pool	30	90	1	40
232508	Tangleflags West G.P. Sand Pool	30	90	1	40
234132	Tangleflags West Lloydminster Sand Pool	30	90	1	40

MAXIMUM PERMISSIVE RATE FACTORS*

HORIZON POOL CODE	POOL NAME	AVERAGE INTERSTITIAL WATER (SW)	AVERAGE SHRINKAGE FACTOR (1/Boi)	ASSIGNED AREA (LSDS) (A)	ASSIGNED AREA (ACRES)
230901	Tangleflags West Mannville Sands Pool	30	90	1	40
231207	Tangleflags West McLaren Sand Pool	30	90	1	40
232131	Tangleflags West Sparky Sand Pool	30	90	1	40
433098	Tatagwa Midale Beds Pool	35	92	1 & 2	40 & 80
433088	Tatagwa North Midale Beds Pool	35	92	2	80
227321	Verendrye Viking Sand Pool	35	90	1	40
314547	Verlo Roseray Sand Pool	21	90	2	80
435170	Viewfield Frobisher Beds Pool	35	86	1	40
433071	View Hill Midale Beds Pool	50	89	2	80
238661	Wapella Sand Pool	25	99	1	40
435784	Warmley Alida Beds Pool	35	90	2	80
436277	Wauchope Alida Tilston Beds Pool	35	75	1	40
437003	Wauchope North Tilston Beds Pool	40	90	1	40
435169	Weir Hill Frobisher Beds Pool	35	75	2	80
435166	West Innes Frobisher Beds Pool	35	89	2	80
433077	West Kingsford Midale Beds Pool	35	83.6	2	80
232510	Westhazel G.P. Sand Pool	30	90	1	40
232136	Westhazel Sparky Sand Pool	30	90	1	40
435162	Weyburn Frobisher Beds Pool	35	89	2	80
433074	Weyburn Midale Beds Pool	35	89	2	80
	(Northern Portion of Pool)	50	89	2	80
437012	White Bear Tilston Beds Pool	40	90	1	40
437577	White Bear Tilston-Souris Valley Beds (Tilston)	40	90	1	40
	(Souris Valley)	50	90	1	40
330075	Whitemud Shaunavon Pool	20	91	4	160
227326	Whiteside Viking Sand Pool	40	91	1	40
435783	Wildwood Alida Beds Pool	35	75	2	80
435011	Willmar Frobisher-Alida Beds Pool	25	78	1 & 2	40 & 80
435188	Winmore Frobisher Beds Pool	45	85	2	80
235007	Winter Cummings Sand Pool	30	90	1	40
435012	Wordsworth Frobisher-Alida Beds Pool	35	75	2	80
435183	Workman Frobisher Beds Pool	35	84	2	80
433017	Workman Midale Beds Pool	35	79	2	80

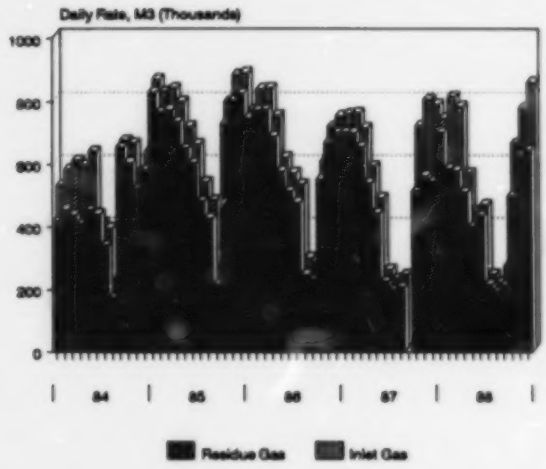
* Factors in effect on June 1, 1989

GAS PLANT

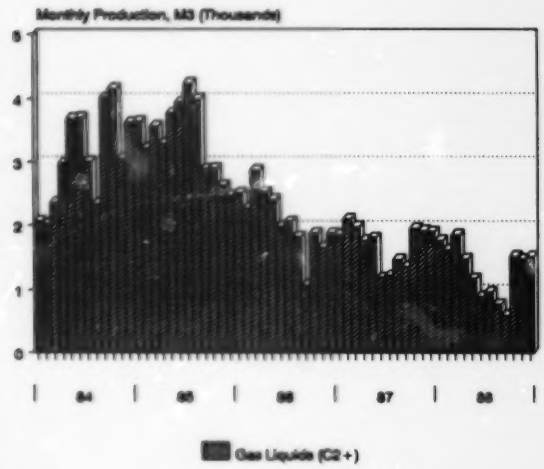
PERFORMANCE GRAPHS

COLEVILLE GAS PLANT

Average Daily Inlet and Residue Gas

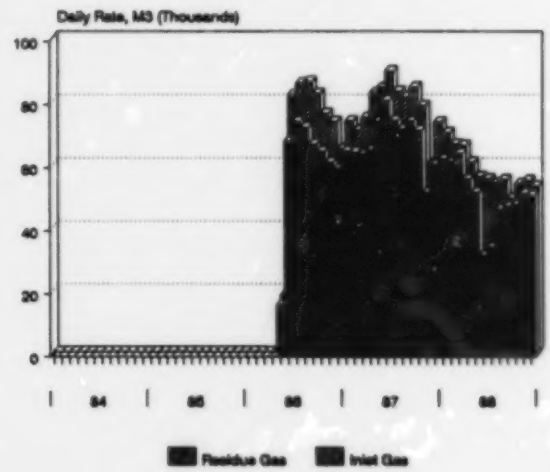


Monthly Gas Liquids (C2+) Production

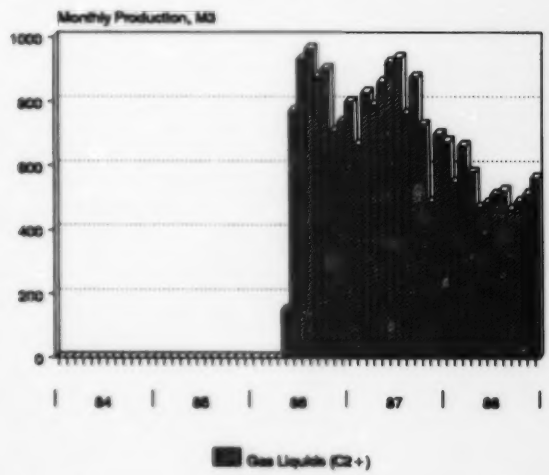


COLEVILLE (WESTAR) GAS PLANT

Average Daily Inlet and Residue Gas

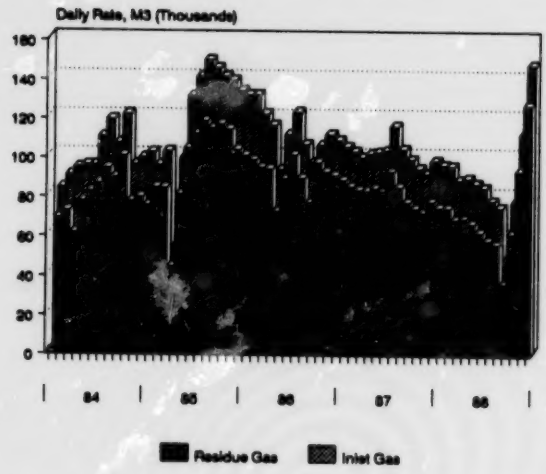


Monthly Gas Liquids (C2+) Production

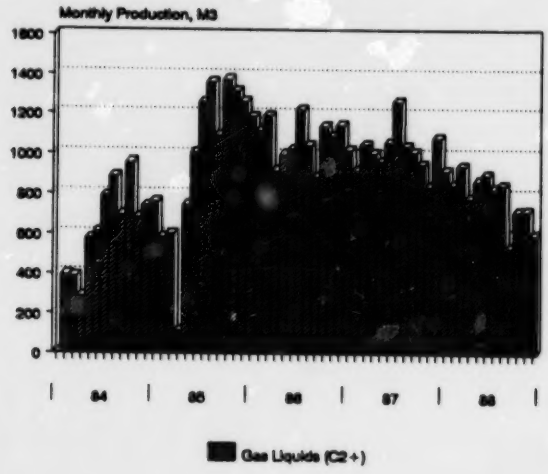


DODSLAND GAS PLANT

Average Daily Inlet and Residue Gas

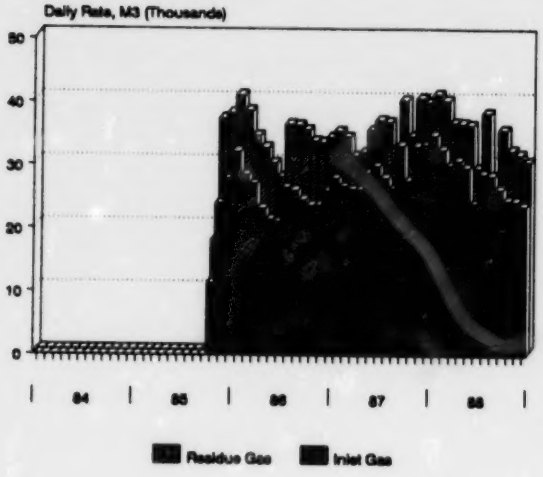


Monthly Gas Liquids (C2+) Production

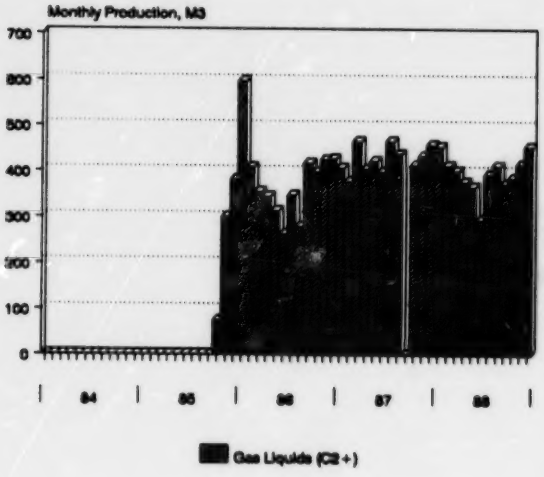


KERROBERT GAS PLANT

Average Daily Inlet and Residue Gas

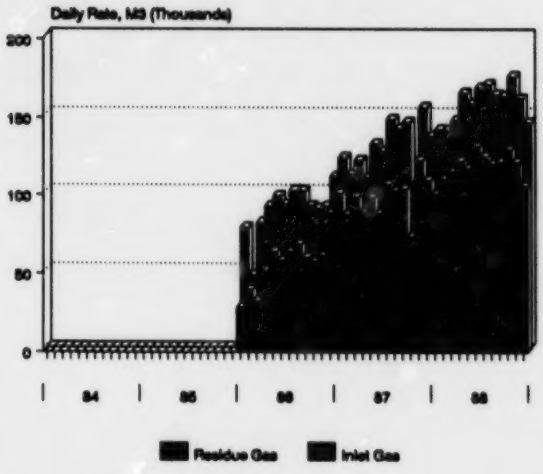


Monthly Gas Liquids (C2+) Production

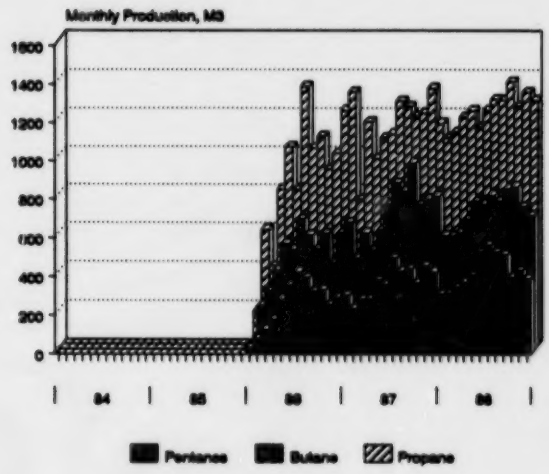


NOTTINGHAM GAS PLANT

Average Daily Inlet and Residue Gas

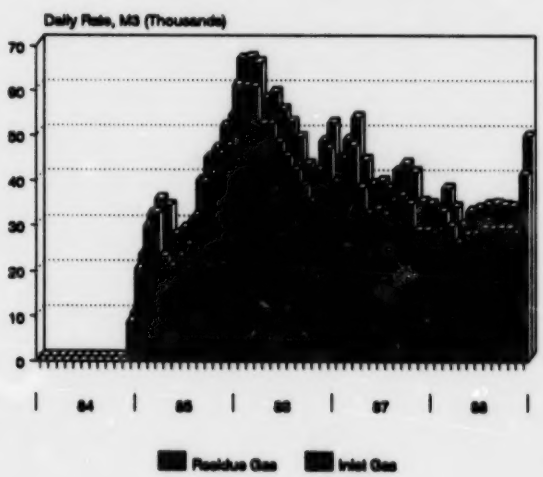


Monthly Gas Liquids Production

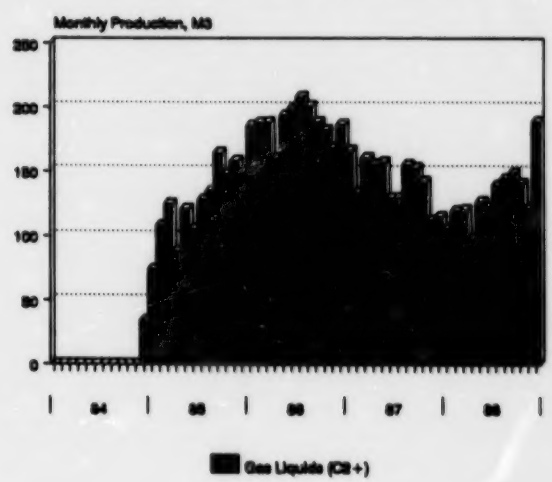


SMILEY (ALLHEART) GAS PLANT

Average Daily Inlet and Residue Gas

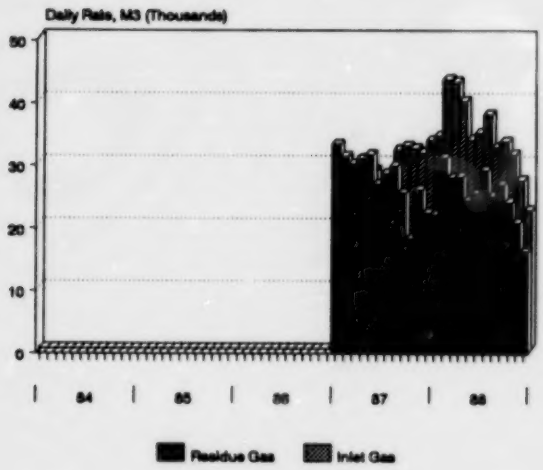


Monthly Gas Liquids (C2+) Production

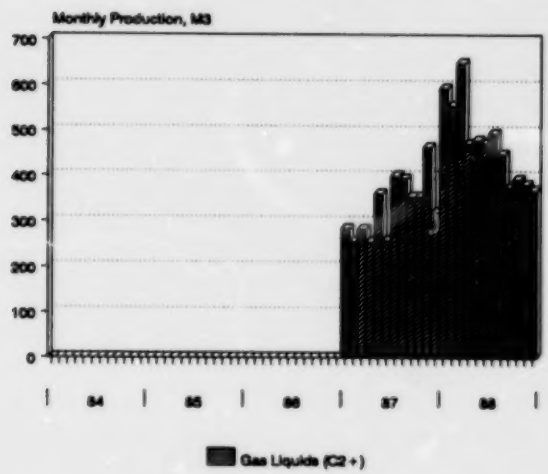


SMILEY (ANTELOPE) GAS PLANT

Average Daily Inlet and Residue Gas

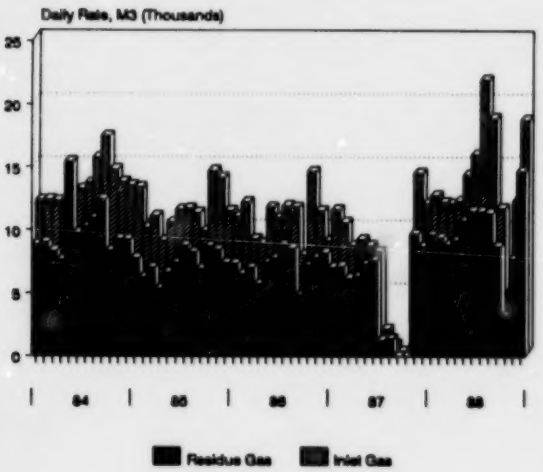


Monthly Gas Liquids (C2+) Production

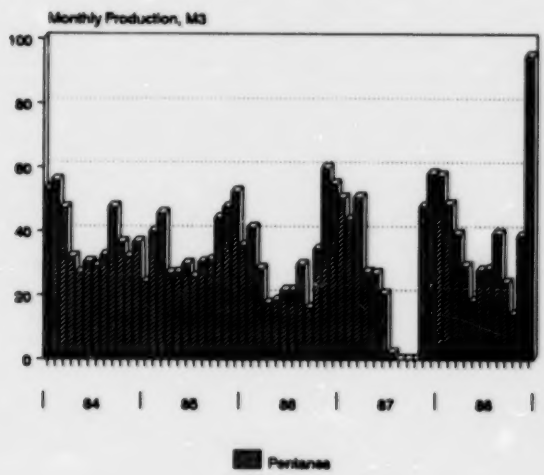


SMILEY (ESSO) GAS PLANT

Average Daily Inlet and Residue Gas

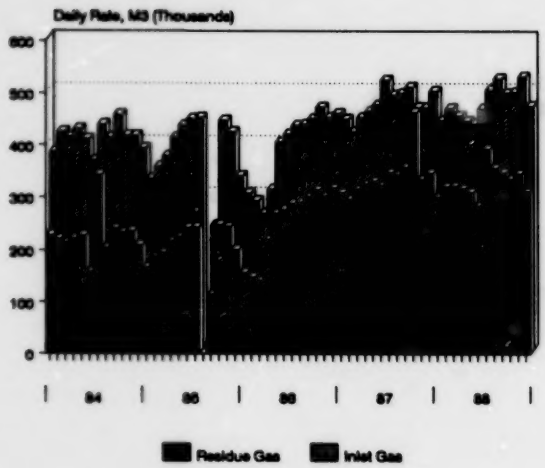


Monthly Pentanes Production

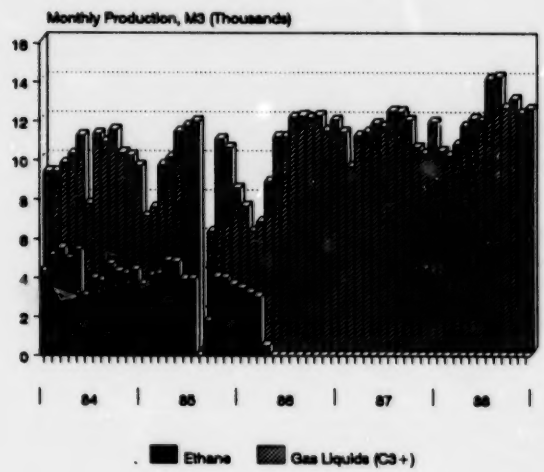


STEELMAN GAS PLANT

Average Daily Inlet and Residue Gas

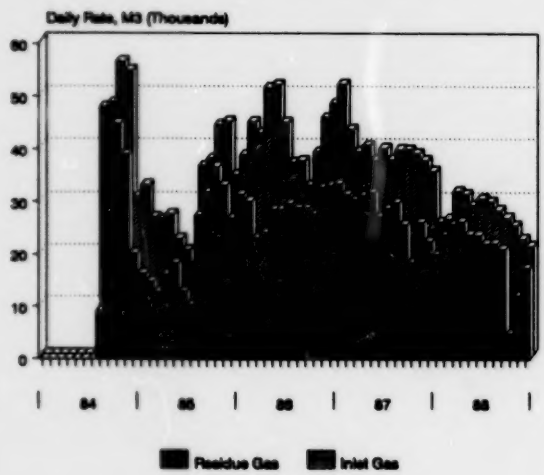


Monthly Gas Liquids Production

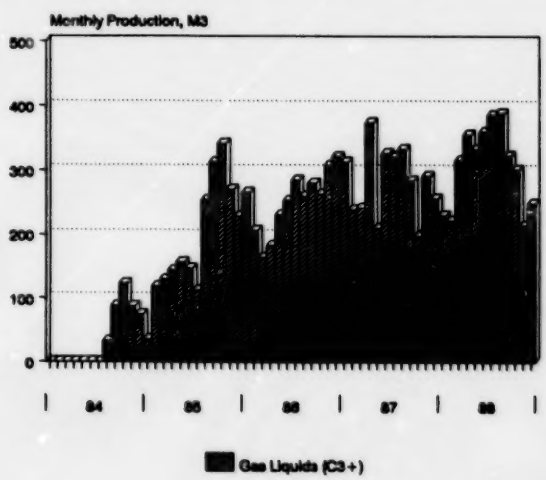


STEELMAN NORTH GAS PLANT

Average Daily Inlet and Residue Gas

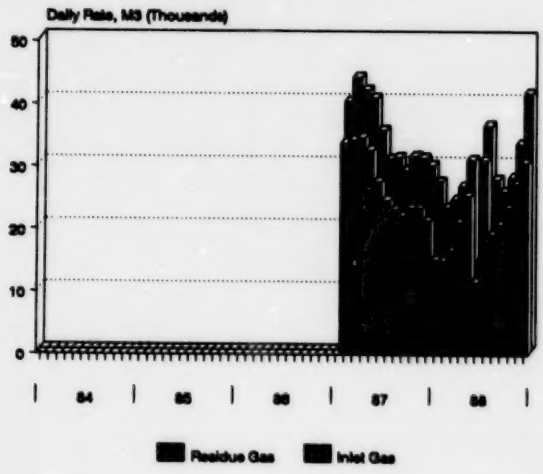


Monthly Gas Liquids (C3+) Production

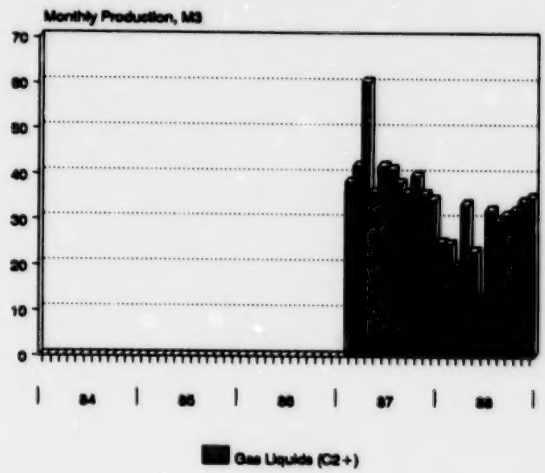


WEST GULL LAKE GAS PLANT

Average Daily Inlet and Residue Gas



Monthly Gas Liquids (C2+) Production



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Regina, Saskatchewan
S4P 4V4
Telecopier/Fax: (306) 787-7338
Executive Director: B. W. Wilson, P.Eng.
Ph. (306) 787-2591

Engineering Services Branch

Director: M. A. Sereda, P.Eng.
Ph. (306) 787-2318

Petroleum Development Branch

Director: J. L. Gossard
Ph. (306) 787-2593

Field Offices

Estevan – 1219 Fifth Street S4A 0Z1
Officer in Charge: J. M. Wysminity
Ph. (306) 634-0751
Telecopier/Fax: (306) 634-0756

Swift Current – 350 Cheadle Street West S9H 4G3
Officer in Charge: A. R. Dafoe
Ph. (306) 778-8252
Telecopier/Fax: (306) 778-8256

Kindersley – Box 850 S01 1S0
Officer in Charge (Acting): D. Monuik
Ph. (306) 463-2523
Telecopier/Fax: (306) 463-6650

Lloydminster – 4815 - 50th Street S9V 0M8
Officer in Charge: B. Mathieson
Ph. (306) 825-8977
Telecopier/Fax: (306) 825-3202